SONY®

DIGITAL COLOR PRINTER

UP-D5500

SERVICE MANUAL

Vol. 1 (1st Edition)

Related Manual

Mechanical operation is the same as those of UP-5500.
Therefore, refer to UP-5500 SERIES SUPPLEMENT-1
(9-974-758-81).

CONTENTS

SONY.

3-859-395-12 (1)

English

Digital Color Printer

Instructions For Use Page 2

Before operating this unit, please read this manual thoroughly and retain it for future reference.

Mode d'emploi Page 40

Avant la mise en service de cet appareil, prière de lire attentivement ce mode d'emploi que l'on conservera pour toute référence ultérieure.

Gebrauchsanweisung Seite 78

Bevor Sie dieses Gerät verwenden, lesen Sie diese Anleitung bitte sorgfältig durch, und bewahren Sie sie für später zum Nachschlagen auf.

UP-D5500

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Owner's Record

The model and serial numbers are located at the rear. Record these number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. _____
Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Symbol on the products

This symbol indicates the equipotential terminal which brings the various parts of a system to the same potential.

WARNING

When installing the unit, incorporate a readily accessible disconnect device in the fixed wiring.
If a fault should occur during operation of the unit, operate the disconnect device to switch the power supply off.

For the customers in the U.S.A.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used i accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You can cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This device requires shielded interface cables to comply with FCC emission limits.

For the customers in Europe

Important safeguards/notices for use in the medical environments

1. All the equipments connected to this unit shall be certified according to Standard IEC601-1, IEC950, IEC65 or other IEC/ISO Standards applicable to the equipments.

2. When this unit is used together with other equipment in the patient area*, the equipment shall be either powered by an isolation transformer or connected via an additional protective earth terminal to system ground unless it is certified according to Standard IEC601-1.
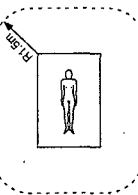
* Patient Area

3. The leakage current could increase when connected to other equipment.

4. This equipment generates, uses, and can radiate frequency energy. If it is not installed and used in accordance with the instruction manual, it may cause interference to other equipment. If this unit causes interference (which can be determined by unplugging the power cord from the unit), try these measures: Relocate the unit with respect to the susceptible equipment. Plug this unit and the susceptible equipment into different branch circuit. Consult your dealer.

About This Manual

This manual is divided into four chapters. This section explains the organization of this manual.

Introduction

Describes the features and system configuration of the digital color printer. Notes the precautions to be observed when using the printer. Also provided is information on the location and function of parts.

Preparation

Explains the steps involved in setting up the printer prior to getting started—checking the supplied accessories, assembly, setting the SCSI DIP switch and connections.

Operation

Describes loading of the ink ribbon cassette and print paper and actual printing operation. Also provided is information on setting the print quantity and setting up the printer specifications.

Others

Provides technical information on the printer, how to handle error messages displayed in the printer window display, and how to deal with paper jams.

Conventions used

Cross reference

Throughout this manual you will find the references to other sections of the manual that contain related information.

Important note

Be sure to read the sections of the manual marked **Note**. They explain points that you should be aware of to operate the printer correctly and prevent malfunctions.

Trademarks

Macintosh is the trademark of Apple Computer, Inc., USA.
MS-Windows is the trademark of Microsoft Corporation, USA.

Table of Contents

System Overview

The Sony UP-D5500 digital color printer is designed to reproduce computer images on A5-size paper.

You can print out image data of MS-Windows or Macintosh graphics application software in high resolution (300dpi) and 256 shades of gray or in full color (16,700,000 colors).

System Configuration

The following shows an example printer system configuration.

Computer
Controls the printer operation.

Digital color printer
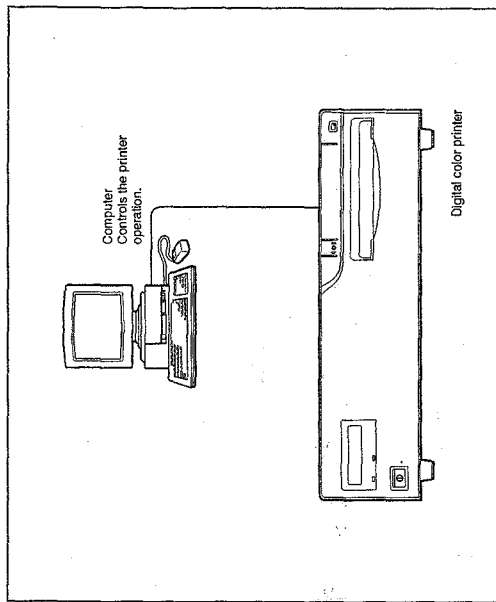
Precautions

Safety

- Operate the printer using the power source specified in "Specifications" (page 36)
- Be careful not to damage the power cable by placing or dropping heavy objects on it; it is dangerous to use the unit with a damaged power cable.
- If you do not intend to use the unit for a long time, disconnect the power cable.
- Unplug the power cable by grasping the plug, not the cable itself.
- Do not disassemble the unit.
- Do not remove the cover. There is a danger of electric shock from the internal parts.
- Be careful not to spill water or other liquids on the unit, or to allow combustible or metallic material to enter the cabinet. If used with foreign matter in the cabinet, the unit is liable to fail, or present a risk of fire or electric shock.
- If the unit malfunctions or if a foreign body falls into the cabinet, disconnect the power immediately and consult your Sony service facility or your Sony dealer.
- When transporting the printer, remove the ink ribbon cassette and paper tray from the printer.

Installation

- Avoid placing the unit in a location subject to:
  - mechanical vibration
  - high humidity
  - excessive dust
  - direct or excessive sunlight
  - extremely high or low temperatures
- Ventilation holes are provided to prevent the unit from overheating. Be careful not to obstruct them with other units or by covering the unit with a cloth etc.

Ventilation holes

Location and Function of Parts and Controls

Front

For details, refer to the pages given in parentheses.

1 ⏻ POWER switch
Press to turn the printer on or off.

2 PRINT lamp
Lights while the printer is printing.

3 ALARM lamp (38)
Lights in orange when the ink ribbon or paper is exhausted, the paper jams, or another problem occurs.

4 Printer window display (28)
Displays the menus and the messages. If an error occurs, a corresponding error message is displayed.
The brightness of the printer window display can be adjusted with the SYSTEM SETUP menu.

5 Front panel (16)
Pull the top on the front door toward you to open it.

8 | Introduction

Opening the front panel reveals the sub panel buttons, ink ribbon cartridge, paper tray, paper cover and so on.

When the front panel is open.

ⓐ EJECT button (16)
Push to eject the ink ribbon cartridge.

ⓑ Ink ribbon cartridge compartment (16)
Insert the ink ribbon cartridge (the ink ribbon holder loaded with an ink ribbon)

Introduction | 7

On condensation

- If the printer is subjected to wide and sudden changes in temperature, such as when it is moved from a cold room to a warm room or when it is left in a room with a heater that tends to produce large amounts of moisture, condensation may form inside the printer. In such cases the printer will probably not work properly, and may even develop a fault if you persist in using it. If moisture condensation forms, turn off the power and leave the printer to stand for at least one hour.
- If the printing pack is subjected to wide and sudden changes in temperature, condensation may form on the ink ribbon or paper inside. This will cause the printer to malfunction. Also if the printing pack is used in this state, spots are likely to appear on the printout.
- To store a half-used printing pack, replace it in its original packing and reseal the package. If possible, keep the sealed printing pack in a cool, dark location. To subsequently use the printing pack, place it, in its sealed package, in a warm room for several hours. Doing so prevents condensation from forming when the printing pack is removed from its package.
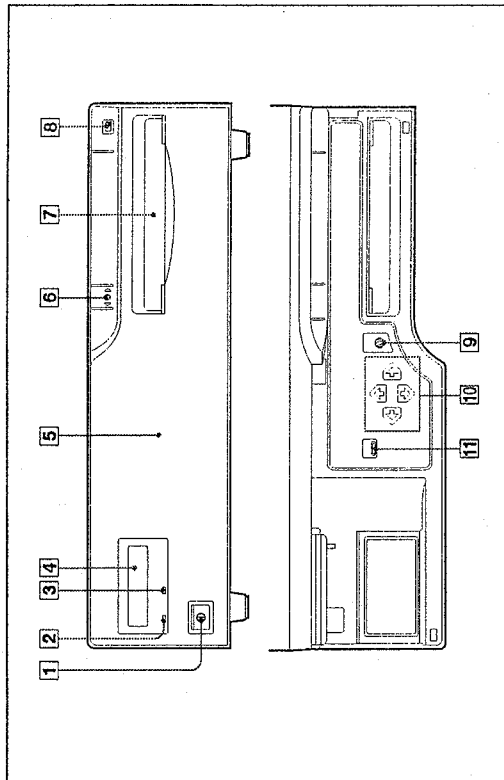
Cleaning

Clean the cabinet, panel and controls with a soft dry cloth, or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of solvent, such as alcohol or benzine, which may damage the finish.

Supplied Accessories

This printer is packed together with the following accessories. Check that nothing is missing from your package.

Ink ribbon holder (1)

Paper tray (1)

Paper cover (1)

AC power cord (1)

Color printing pack (1)
2-HD floppy disk (Windows software) (2)
2-HD floppy disk (Macintosh software) (1)
Instruction manual for the printer driver (1)
User registration card (1)
Software license agreement (1)
Operating Instructions (1)
Warranty card (1)

Notes
- Retain the original carton and packing materials in case you have to transport the unit in the future.
- Remove the ink ribbon holder and paper tray when transporting the printer.

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⑤ **Paper cover (11)**
Paper is ejected onto this cover.

⑥ **Paper tray (11)**
Load paper into this tray.

⑦ **Sub panel buttons**
On the sub panel, there are EXEC button ⑨, cursor keys ⑩ and MENU button ⑪. For details, see the explanations of each button.

⑥ **⏹STOP button (22)**
Press to stop printing part-way. The printer stops printing after completing the current printing.

⑦ **Paper ejection slot**
The printout is ejected here.

⑧ **⊐PRINT button**
Press to make a printout.

⑨ **EXEC button (34)**
Press this button to execute the values set with the COLOR ADJUST menu.

⑩ **Cursor keys**
Used for menu operation.

⑪ **MENU button**
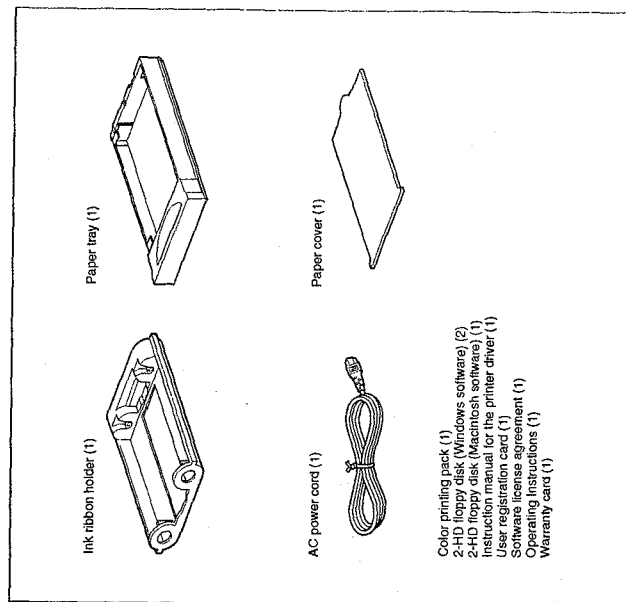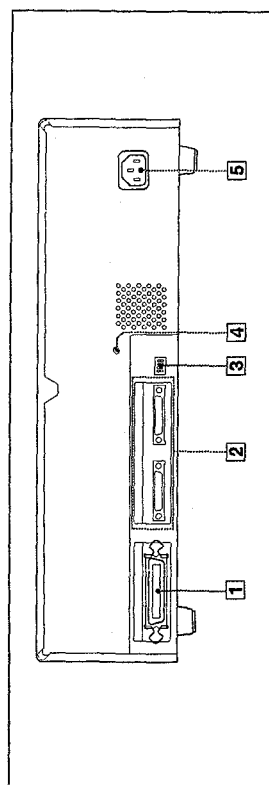Press this button to display or clear the menus on the printer window displays.

Rear

① **Parallel interface connector (Amphenol 36-pin) (15)**
Used to connect a computer, that supports the parallel interface, using the parallel data cable (not supplied).
Refer to "Important safeguard/notices for use in the medical environments on page 2.

② **SCSI connector (Half-pitch 50-pin) (14)**
Used to connect a computer, or another peripheral, through an SCSI cable. The other connector is loop-through connector for another SCSI device. If either of the two connectors is not being used, set the terminator of the DIP switch to ON. (see "Setting the DIP Switch" on page 12)

③ **SCSI ID DIP switch (12)**
Used to set the SCSI ID number and the built-in terminator to ON or OFF. (see "Setting the DIP Switch" on page 12)

④ **Equipotential ground terminal ⏚**
Used to connect to the equipotential plug to bring the various parts of a system to the same potential.
Refer to "Important safeguards/notices for use in the medical environment" on page 2.

⑤ **~AC IN connector (14, 15)**
Used to connect the printer to a wall outlet with the supplied power cord.

Setting the DIP Switch

The DIP switches on the rear panel determine the on/off state of the internal SCSI bus terminator and SCSI device ID number.

ON 4 2 1 / OFF
Terminator   SCSI ID
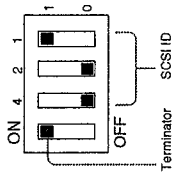
Terminator ON/OFF setting

If the printer is located at the physical end of the SCSI bus, this switch should be set to ON. Otherwise, if another device is at the end of the bus, this switch should be OFF.

Switch	ON	OFF
Terminator	The internal terminator is ON.	The internal terminator is OFF.

SCSI ID setting

The SCSI ID selection must be different from any other device on the bus. If two SCSI ID devices have the same ID, a malfunction will occur.

| SCSI ID	SCSI ID switch		
	4	2	1
0	0	0	0
1	0	0	1
2	0	2	0
3	0	2	1
4	4	0	0
5	4	0	1
6	4	2	0
7	4	2	1

Assembly

Attach the supplied paper cover, paper tray and ink ribbon holder to the printer. For details of how to assemble them, see the pages given in parentheses.

Ink ribbon holder
(Load the ink ribbon into the ribbon holder first, then mount as a unit.)
(page 16)

Paper tray (page 19)

Paper cover

Connecting the Computer

The UP-D5500 connects to either of the computer that supports the SCSI interface or parallel interface.

Before connecting the computer, see "Important safeguards/notices for use in the medical environment" on page 2.

Notes

- When connecting the printer to the computer that supports the Centronics interface, do not connect the printer to the computer that supports the SCSI interface, and vice versa.
- Turn off the power of each device before attempting to make any connections.
- Grab the connector at the end of the connecting cable, and firmly insert it into the socket.

Connecting the Computer Supporting the SCSI Interface

Notes

- Before connecting the SCSI cable, make sure to turn off the power switches on your computer and any peripheral equipment.
- The total length of the SCSI cabling used with a single-host computer should be less than 6 meters.
- The length of the SCSI cabling used with a single-host computer should be less than 1 meters.

Computer

SCSI cable[a] (not supplied)

to SCSI connector[b]

AC power cord (supplied)

to ~AC IN   to wall outlet

SCSI ID DIP switch[b]

a) If the printer is located at the physical end of the SCSI bus, this switch should be set to ON. (see "Setting the DIP Switch" on page 12)
b) TOTAL TECHNOLOGIES, LTD. SCSI-C52A-05, etc.

Setting the SCSI Device Type

You need to set the SCSI Device Type according to the system environment in case of the SCSI connection.

1 While pressing the MENU button, turn on the power of the printer. The DEVICE TYPE menu appears in the printer window display.

2 Check that the SCSI Device Type set to the system used is displayed on the printer window.

```
DEVICE TYPE:   ③
2/3          [EXEC]
```
———— Currently selected device type

Windows 95: Set to 3.
Windows 3.1: Set to 2.
Macintosh: Set to 2.

3 If the setting is incorrect, set the correct number by pressing the ◇ or ◇ button, then press the EXEC key.

```
DEVICE TYPE:   ②
2/3          [EXEC]
```
———— Press the ◇ or ◇ button until the proper device type appears in the printer window display.

4 Turn off the printer.

Note

You need a driver software according to the system environment to print.

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1-7

Before Printing

This section describes the following operations that must be made prior to starting printing after mounting the paper tray and paper cover on the printer and making the necessary connections.

- Loading an ink ribbon cartridge (see the following)
- Loading paper (see page 19)

Once the above operations have been completed, there should be no need to repeat them during routine printing. Perform them only when absolutely necessary.

Loading an Ink Ribbon Cartridge

To make printouts, an ink ribbon cartridge (an ink ribbon holder which has been loaded with an ink ribbon) and paper must be loaded. The cartridge and paper must be compatible. (see "Ink Ribbon and Paper" page 35)

Load the ink ribbon into the supplied ink ribbon holder, then load the ink ribbon cartridge into the printer's ribbon compartment. The supplied ink ribbon holder can be used for both the color printing and transparency printing.

Use the ink ribbon and print paper (supplied) to check if the video printer functions properly.

Notes
- Before attempting to load an ink ribbon into the ink ribbon holder, check that the ribbon and paper are compatible. If the printer detects an incompatible combination, an error message appears in the printer window display and operation is disabled.
- Use only ink ribbons and paper that are designed for use with this printer. Failing to do so is likely to result in unsatisfactory printing or malfunctions.
- When replacing the ink ribbon, do not turn off the power. Turning off the power will cause the image stored in the memory (also called memory image in this manual) to be lost.

1 Open the front panel by pulling the front panel top toward you.

2 Remove the ink ribbon cartridge by pushing the EJECT button.
The ink ribbon cassette pops out.

Note
SCSI cable connection requirement can vary between different computers and peripherals. For the details of your installation, refer to the manual of your computer and peripherals.
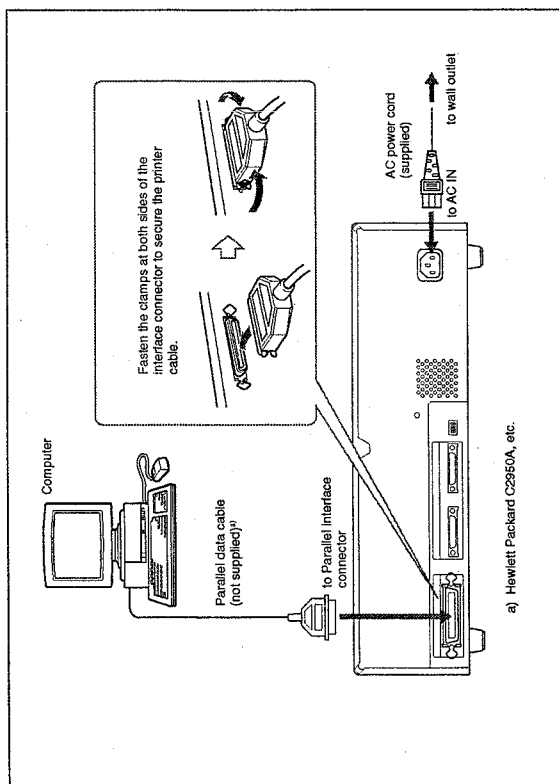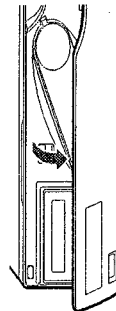
Turning on the power
You should turn on all peripheral devices before turning on your computers. Particularly, make sure that all SCSI peripheral are turned on first.

Connecting the Computer Supporting the Parallel Interface

Notes
- Before connecting the parallel cable, make sure to turn off the power switches on your computer and any peripheral equipment.
- Use the shielded cable that should be less than 3 meters and conforms to the parallel specification, as the printer cable.
- To use the printer in ECP mode, use an interface cable in conformity to IEEE STD 1284 such as Hewlett Packard C2950A.

Computer

Parallel data cable (not supplied)[a]

to Parallel Interface connector

Fasten the clamps at both sides of the interface connector to secure the printer cable.

AC power cord (supplied)

to AC IN   to wall outlet

a) Hewlett Packard C2950A, etc.

Note
The parallel cable connection requirement can vary between different computers and peripherals. For the details of your installation, refer to the manual of your computer and peripherals.

Note

Never put your hand into the ink ribbon compartment. The thermal head becomes very hot. You may burn yourself if you touch it.
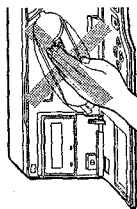
When the ink ribbon cartridge cannot be ejected

Turn the power off, then back on again. Then, after a while, press the EJECT button.

In this case, the image in memory will be lost.

3 Detach the used ink ribbon from the ink ribbon holder.

① Remove the spool holding the ink ribbon.
② Remove the other spool.

4 Load the ink ribbon into the ink ribbon holder.

Sheet
Ink ribbon
Ink ribbon holder

① Load the spool holding the ink ribbon into the left-hand part of the holder.
② Pull up and remove the sheet. "START" position marker
③ Fit the other spool into the right-hand part of the holder.
④ Wind the spools of the ink ribbon as illustrated until a START position marker appears.

5 Remove any slack from the ink ribbon.
If the ribbon is left slack, it may be damaged when inserted.

"START" position marker

Wind the spool until the "START" position marker faces upward.

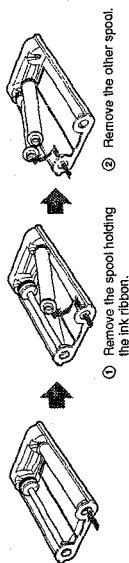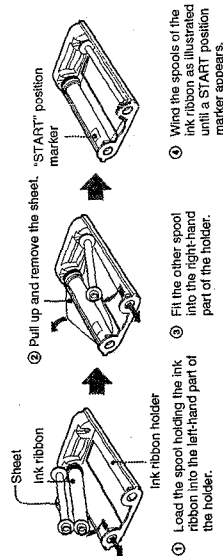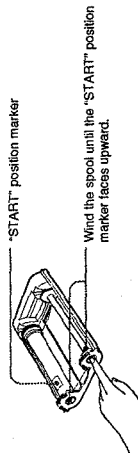**6** Insert the ink ribbon cartridge firmly until it stops.
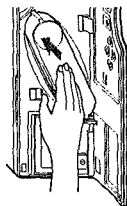
When the ink ribbon cartridge cannot be inserted

Turn the power off, then back on again. Then, insert the ink ribbon holder.

7 Close the front panel.
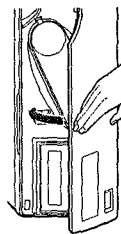
Notes

When using ink ribbons

• Once an ink ribbon has been completely used, replace it. Ink ribbons are not reusable.
• Do not touch the ink ribbon or place it in a dusty location. Finger prints or dust on the ink ribbon will result in imperfect printing or malfunction of the head.

When storing ink ribbons

• Avoid placing the ink ribbon in a location subject to:
 – high temperatures
 – high humidity
 – excessive dust
 – direct sunlight
• Store a partially used ink ribbon in its original packaging.

If your ink ribbon should tear

Repair the tear with transparent tape. There should be no problem with using the remaining portion of the ribbon.

Transparent tape

Turn the spool in the direction of the arrow to remove any slack until the transparent tape cannot be seen.
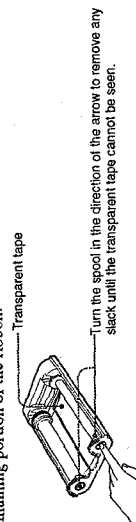
Loading Paper

To load paper, follow the procedure below. Be careful not to touch the printing surface.

Notes
- When loading the paper while the printer is operating, do not turn off the power. Turning off the power will cause the image stored in memory to be lost.
- Use only the paper recommended in this manual. Otherwise, malfunction such as paper jams are likely to occur.

1 Open the front panel by pulling the front panel top towards you.

2 Push in the paper tray.
The paper tray is ejected.

3 Place the print paper in the paper tray.

Notes
- The paper tray holds up to 100 sheets of paper. When adding paper to a partly full tray, be careful that the total number of sheets does not exceed 100. If you exceed this limit, paper jams may occur.
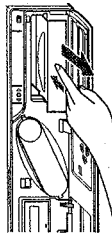- When adding paper to a partly full tray, remove the printing surface protection sheet (black or blue). Do not place different types of paper in the tray. Doing so may cause paper jams to occur.
- Load the paper so that it lays flat in the paper tray. If the paper is curled, it will overflow from the paper tray and the printing position may shift. If this happens, load fewer sheets in the paper tray.

When using the paper for color printing, place the paper in the paper tray with its printing surface protection sheet facing down.

Printing surface

Printing surface protection sheet

Front

Set the paper securely under the tab.

Riffle the paper with the protection sheet.
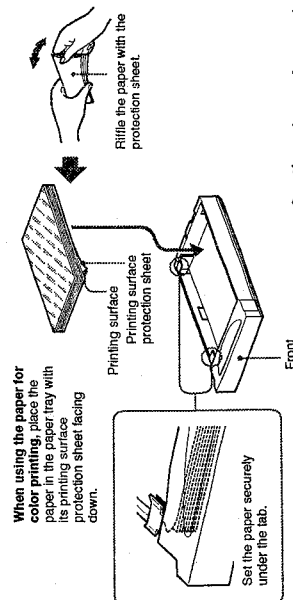
Continue to next page →

4 Slide the paper tray back into the printer until it clicks into place.

5 Close the front panel.

Notes
When handling the paper
Do not touch the printing surface. Dust or finger prints are likely to cause unsatisfactory printing. Hold the paper by the printing surface protection sheet.
When storing print paper
- Avoid storing the print paper in a location subject to:
  - high temperatures
  - high humidity
  - excessive dust
  - direct sunlight
- Use the original package for storing unused paper.

Printing

Before printing
- Ensure that the printer is properly connected to the computer (page 14).
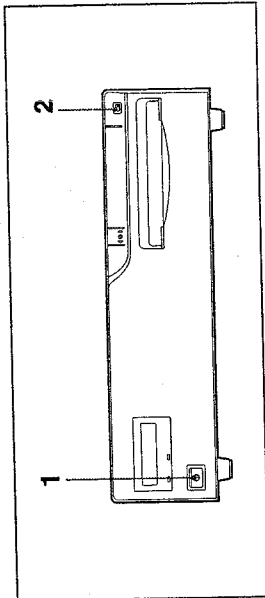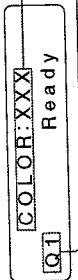- Ensure that the combination of the ink ribbon and print paper is correct (page 35).
- Ensure that the ink ribbon cassette and print paper are properly loaded (pages 16, 19).

1 Turn on the power of the printer, then computer.
When the printer is in standby status, the following message appears in the printer window display.

```
COLOR:XXX
Q1    Ready
```

Displays the ink ribbon type and remaining amount of ribbon (indicates the number of printouts that can still be made with the ribbon) when RIBBON REMAIN is set to ON. (see page 26)

Number of copies to be printed.

Notes
- When the printer is connected to the computer through the SCSI bus or parallel interface bus, turn on the power of the printer before turning on the computer.
- Never turn the printer on or off while the computer is accessing its hard disk, floppy disk or another SCSI device.

2 Send the image data from the computer to the printer, then enter the print command or press the PRINT button of the printer.

① While the printer is receiving the image data from the computer, the following message appears:
The data is written in the memory of the printer.

```
[ > > > > > > > ]
Q1    Send
```

Indicates the data transmission rate in 1/8 precision.
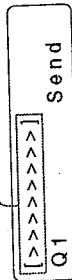
Printing (continued)

② The stored image data is printed as soon as the print command is entered from the computer or the PRINT button of the printer is pressed.

```
YELLOW PRINTING
```
Color indication changes as the color printing proceeds:
YELLOW→MAGENTA→CYAN

③ It takes about 40 seconds for a 300 dpi color printout to emerge from the paper outlet.
Once printing has been completed, the printer returns to standby status.

Notes
- Do not turn off the power during printing. If you do so, paper may not be ejected and may jam in the printer.
- Do not pull the paper out till the printer finishes printing.
- To prevent paper jamming, do not allow more than 10 printouts on the paper cover.

To stop transferring the data midway
Send the command to stop transferring data from the computer.
The printer returns to standby status.

Note
You cannot stop printing midway.
If you press the STOP button of the printer or the computer sends the command to stop printing, the printer stops printing after completing the current printing. When the multiple quantities of printouts are set, the printer stops printing after completing current printing and does not print remaining copies.

If the printer does not print
The printer will fail to print in the following cases:
- While an error message is displayed on the printer window display. Proceed as described in "Error Messages" on page 38. In this case, the paper is ejected without printed, even if you press the PRINT button or the printer receives the print command from the computer.
- Image data stored in the memory is lost if you turn off the power. Store the image into memory again, then press the PRINT button.

If the image quality of printouts is not satisfactory
You can adjust the image quality of the printouts. (See "Adjusting the Sharpness and Adjusting the Printout Color" pages 29 and 31.)

Notes
When storing your printouts:
- Avoid storing the printout in a location subject to high temperatures, high humidity, excessive dust and direct sunlight.
- Do not stick tape on a printout. Also, avoid leaving a plastic eraser on a printout or placing a printout in contact with materials which contain plasticizer (under a desk mat, for example).
- Do not allow alcohol or other volatile organic solvents to come into contact with the printouts.

Setting the Print Quantity

You can set a print quantity value up to 9 before printing.

1, 5 2, 3, 4
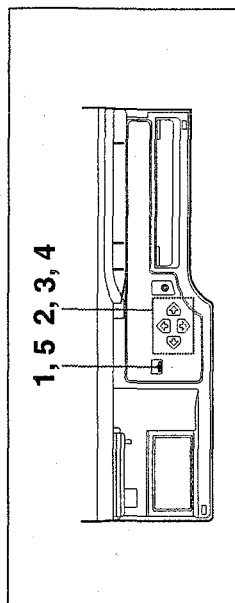
1 Press the MENU button.

2 Select PRINT SETUP on the displayed menu by pressing the ⇦ or ⇨ button.

Press the ⇦ or ⇨ button until PRINT SETUP appears.

```
PRINT SETUP
sys/PRINT/cadj
```

3 Select PRINT QTY by pressing the ⇧ or ⇩ button.

Press the ⇧ or ⇩ button until PRINT QTY appears.

```
PRINT QTY:    01
DOWN<-->UP
```

4 Set the quantity by pressing the ⇧ or ⇩ button.
⇧: The number increase.
⇩: The number decreases.
When you keep the button pressed, the number changes quickly.

```
PRINT QTY:    01
DOWN<-->UP
```

Press the ⇦ or ⇨ button until the desired number of copies appears.

5 Press the MENU button.
The printer is reset to normal operation mode.

If the paper runs out during printing
Load the paper into the paper tray and press the PRINT button. The printer prints the remaining copies.

Setting the Print Quantity (continued)

To check the amount of ink ribbon remaining
If you set RIBBON REMAIN in the SYSTEM SETUP menu is set to ON, the amount of ink ribbon remaining is displayed in the printer window display when the printer is in standby mode.
(See page 26.)
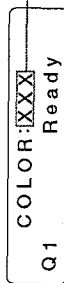
```
COLOR:XXX
Q1     Ready
```
— Number of printouts that can still be made with the ribbon.

Note
Use the ink ribbon from the beginning, or the amount of ink ribbon remaining display may no be correct.

Setting Up the Printer

There are 3 menus that are used to set up the printer. The menus and functions that can be set with those menus are as follows.

Menu	Functions to be set	Reference page
SYSTEM-SETUP	• Selecting whether the ribbon remaining is displayed in the printer window display.	26
	• Selecting whether the operation and error tones sound.	27
	• Adjusting the brightness of the printer window display.	28
PRINT-SETUP	• Setting a print quantity value.	23
	• Adjusting the sharpness.	29
COLOR ADJUST SETUP	Adjusting the printout color (color intensity and contrast).	31

Setting Up the Printer (continued)

Selecting Whether the Ribbon Remaining is Displayed

The ribbon remaining and ribbon type appear in the printer standby mode, if RIBBON REMAIN explained below is set to ON.
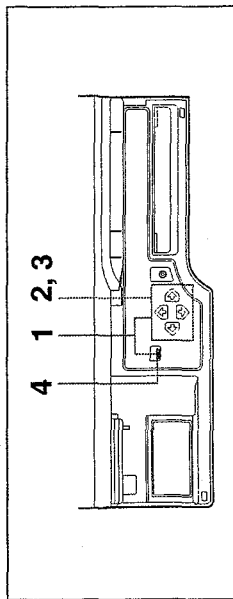
1 Press the MENU button, then select SYSTEM SETUP by pressing the ⇦ or ⇨ button.

SYSTEM SETUP
SYSTEM/prn/cadj

— Press the ⇦ or ⇨ button until SYSTEM SET UP appears.

2 Select RIBBON REMAIN by pressing the ⇧ or ⇩ button.

RIBBON REMAIN
ON/off

— Press the ⇧ or ⇩ button until RIBBON REMAIN appears.

3 Select whether the ribbon remaining is displayed in the printer window display by pressing the ⇦ or ⇨ button.

RIBBON REMAIN :
ON/off

— Display the desired operation in capital letters by pressing the ⇦ or ⇨ button.

When selecting	Selection
To display	ON
Not to display	OFF

4 Press the MENU button.
The regular screen appears.

Adjusting the Brightness of the Printer Window Display

1 Press the MENU button, then select SYSTEM SETUP by pressing the ⬦ or ⬦ button.

— Press the ⬦ or ⬦ button until SYSTEM SET UP appears.

```
SYSTEM SETUP
  SYSTEM/prn/cadj
```
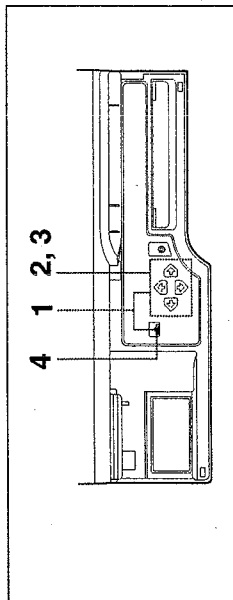
2 Select LCD-CNTR by pressing the ⬦ or ⬦ button.

— Press the ⬦ or ⬦ button until LCD-CNTR appears.

```
LCD-CNTR  :  0
         *
------------
```

3 Adjust the brightness of the printer window display by pressing the ⬦ or ⬦ button.

— The number increases and the contrast increases every time the ⬦ button is pressed.
The number decreases and the contrast decreases every time the ⬦ button is pressed.

```
LCD-CNTR  :  0
         *
------------
```

4 Press the MENU button.
The regular screen appears.

Selecting Whether the Operation and Error Tones Sound

Whenever you press a button on the front panel or sub panel, the operation tone sounds (one time). When an error occurs, the alarm tone sounds (three times). You can turn these tones on and off with menu.

1 Press the MENU button, then select SYSTEM SETUP by pressing the ⬦ or ⬦ button.

— Press the ⬦ or ⬦ button until SYSTEM SET UP appears.

```
SYSTEM SETUP
  SYSTEM/prn/cadj
```

2 Select BEEP by pressing the ⬦ or ⬦ button.

— Press the ⬦ or ⬦ button until BEEP appears.

```
BEEP  :
         ON/off
```

3 Select whether the operation and error tones sound by pressing the ⬦ or ⬦ button.

— Display the desired operation in capital letters by pressing the ⬦ or ⬦ button.

```
BEEP  :
         ON/off
```

When selecting	Selection
To sound the tones	ON
To disable the tones	OFF

4 Press the MENU button.
The regular screen appears.

3 Select the desired sharpness by pressing the ⇦ or ⇨ button.
You can set the sharpness to any of 8 steps from 0 to +7. On a setting of step 4 corresponds to the standard sharpness.

```
SHARPNESS : [4]
- - - * - - -
```

The number and the corresponding sharpness increase every time you press the ⇨ button.
The number and the corresponding sharpness decrease every time you press the ⇦ button.

When selecting	Content of settings
To make a soft outline	Toward step 0
To make a normal outline	Centered (step 4)
To make a sharp outline	To the right (toward step 7)

Note
The printout of the signal sent from the computer without being compensated in the printer is made if you set the sharpness to step 0.

4 Press the MENU button.
The regular screen appears.

Adjusting the Sharpness

You can set the printout sharpness to any of 8 levels. The setting remains effective until reset - even if you turn the power off.
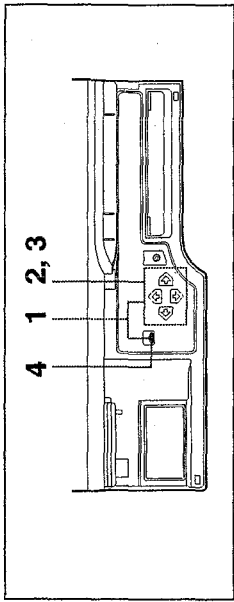
1 Press the MENU button, then select PRINT SETUP by pressing the ⇦ or ⇨ button.

Press the ⇦ or ⇨ button until PRINT SETUP appears.

```
PRINT SETUP
sys/PRINT/cadj
```
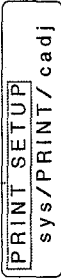
2 Select SHARPNESS by pressing the ⇦ or ⇨ button.

Press the ⇦ or ⇨ button until SHARPNESS appears.

```
SHARPNESS : 4
- - - * - - -
```

Continue to next page →

Adjusting the Printout Color

You can adjust the color intensity (RED/GREEN/BLUE) and contrast (DARK/LIGHT). You can store up to three settings.

These settings are managed according to the PRESET number. The color intensity and picture contrast of a printout are determined by recalling one of the three settings according to their PRESET numbers. Settings can be registered as Preset 1, 2 and 3. The printer retains these settings - even if you turn off the printer power. Also, you can make a printout using temporarily set values, without erasing the stored adjustment values.

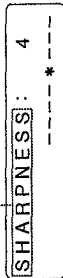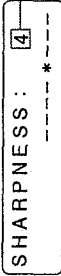All values are factory-set to 0 for PRESET numbers 1, 2 and 3.

1   2, 3, 4, 5, 6   7   8
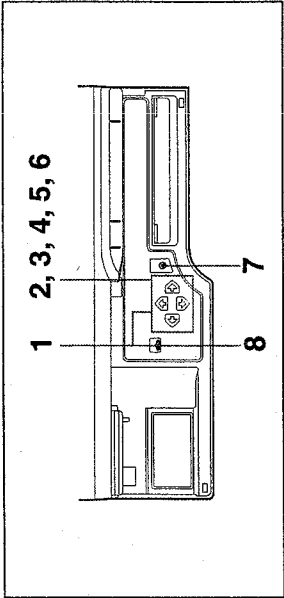
1 Press the MENU button, then select COLOR ADJUST by pressing the ⇦ or ⇨ button.

```
COLOR ADJUST
sys/prn/C-ADJ
```
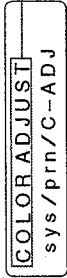
Press the ⇦ or ⇨ button until COLOR ADJUST appears.

2 Select C-ADJ PRESET by pressing the ⇧ or ⇩ button.

```
C-ADJ PRESET:
1/-/-
```
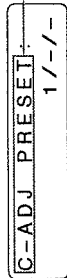
Press the ⇧ or ⇩ button until C-ADJ PRESET appears.

Continue to next page →

Setting Up the Printer (continued)

3 Select the PRESET number of the values to be adjusted or to be modified by pressing the ⇧ or ⇩ button.

```
C-ADJ PRESET:
1/-/-
```
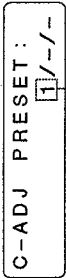
Press the ⇧ or ⇩ button until the desired PRESET number appears.

When modifying, you can preserve the original settings. (See "To retain the originally set value" on page 34.)

4 Adjust the printout color.
① Select the item to be adjusted by pressing the ⇧ or ⇩ button.
② Perform the adjustment by pressing the ⇦ or ⇨ button.

The RED, GREEN and BLUE color component and contrast settings are divided into 15 steps, from -7 to +7, indicated by a value and graph. The center of the graph corresponds to the standard color.

When adjusting the RED/GREEN/BLUE (color intensity)

Adjustment item	When selecting	Button to be pressed	Adjustment direction on the menu
RED C-R	To make the image reddish	⇦ button	Toward R (red)
	To make the image cyan (blue)	⇨ button	Toward C (cyan)
GREEN M-G	To make the image greenish	⇦ button	Toward G (green)
	To make the image magenta (pink)	⇨ button	Toward M (magenta)
BLUE Y-B	To make the image bluish	⇦ button	Toward B (blue)
	To make the image yellowish	⇨ button	Toward Y (yellow)

```
C-ADJ RED:     0
------*--------
```

```
C-ADJ GREEN:   0
------*--------
```

```
C-ADJ BLUE:    0
------*--------
```

Adjust the color intensity

UP-D5500 V1
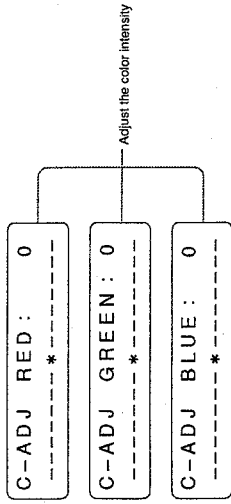
When adjusting DARK/LIGHT (contrast)

```
C-ADJ  DARK :  0
- - - - - * - - - - - -
```
The contrast in the dark area or light area is increased in the + direction by pressing the button.
The contrast in the dark area or light area is weakened in the - direction by pressing the button.

```
C-ADJ  LIGHT :  0
- - - - - * - - - - - -
```
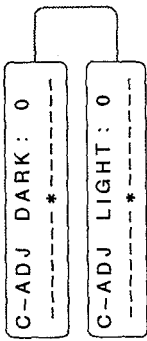
Adjustment item	When selecting
DARK	To adjust the dark area of an image
LIGHT	To adjust the light area of an image

Once you have changed the value

Once you have changed the value, T (temporary) appears on the menu screen. TEMP indicates that the settings are temporary and have not yet been stored.

You can make a printout with the settings made as explained above.

5 Select SAVE by pressing the ⬆ or ⬇ button.

```
C-ADJ  SAVE :
       1/-/- [EXEC]
```
Press the ⬆ or ⬇ button until SAVE appears.
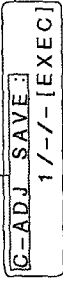
6 Select the SAVE number to which new settings are to be stored by pressing the ⬅ or ➡ button.

```
C-ADJ  SAVE :
       1/-/- [EXEC]
```
Press the ⬅ or ➡ button until the desired PRESET number appears.

To retain the originally set value
Select a SAVE number which is different from the PRESET number selected in step 3.

7 Press the EXEC button.
The settings are registered to the SAVE number selected in step 6.
T disappears from the menu.

8 Press the MENU button.
The regular screen appears.

To copy the settings made for one certain PRESET number to another PRESET number.

1 Select the source PRESET number for which the settings to be copied are stored on the COLOR ADJUST menu.

2 Select the target SAVE number to which data is to be copied.

3 Press the EXEC button.
Settings stored to the PRESET number selected in step 1 are copied to the SAVE number selected in step 2.

Ink Ribbon and Paper

Both paper and an ink ribbon cassette are necessary for printing. ("Ink ribbon cartridge" consists of the supplied ink ribbon holder loaded with ink ribbon.) Use the ink ribbon with the paper contained in the same package. If the printer detects an incompatible combination, an error message appears in the printer window display and printing is disabled.

UPC-5510 Color Printing Pack

Contains color ink ribbon and paper.

Color ink ribbon 1 roll

A-5 (5 3/4 x 8 3/8 inches) size paper 100 sheets x 2

Notes

- Use only the ink ribbon and paper designed for use with this printer. If you use a different type, the printer may not print properly or malfunction.
- Ink ribbon and paper are not re-usable. Once exhausted, replace them with new ones.

Specifications

Printer

Power requirements
  Model for the USA and Canada:
    120 V AC, 50/60 Hz
  Model for the European countries:
    220 to 240 V AC, 50/60 Hz

Power consumption
  Model for the USA and Canada:
    About 2.8 A max. at 25°C,
    120 V AC
  Model for the European countries:
    About 1.2 A max. at 25°C, 240
    V AC

Operating temperature
  5°C to 35°C (41°F to 95°F)

Operating humidity
  20 % to 80 % (no condensation allowed)

Storage and transport temperature
  −20°C to 60°C (−4°F to 140°F)

Storage and transport humidity
  20 % to 90 % (no condensation allowed)

Dimensions About 424 × 124 × 475 mm (w/h/d)
  (16 3/4 × 5 × 18 3/4 inches)

Mass About 17 kg (30 lb 14 oz)

Printing system
  Sublimation heat transfer printing

Thermal head 11.6 dot/mm (2048 dots)

Total gradation
  256 levels each for yellow, magenta, and cyan

Digital interface
  SCSI - 1 channel
    Half-pitch 50-pin connector x 2
  Parallel data interface - 1 channel
    Amphenole 36-pin connector x 1

Printing time Approximately 40 seconds

Supplied accessories
  Ink ribbon holder (1)
  Paper tray (1)
  AC power cord (1)
  Paper cover (1)
  Color printing pack (1)
  2-HD floppy disk
    (Windows software) (2)
  2-HD floppy disk
    (Macintosh software) (1)
  Instruction manual for the printer driver (1)
  User registration card (1)
  Software license agreement (1)
  Instructions for Use (1)
  Warranty card (1)

Interface

Control connector
  IEEE 1284-B connector (amphenol 36-pin)
  Input: Max. 5 V (TTL)
  Output: Max. 5 V (TTL)

Data transmission system
  8 bit, parallel,
  IEEE STD 1284-1994
  (Compatible, Reverse Nibble and ECP modes)

Logic level TTL

Parallel Interface connector pin assignment

Pin No.	I/O	Signal		
		Interface mode		
		Compatible	Nibble	ECP
1	I	nStrobe	HostClk	HostClk
2	I/O		Data1 (LSB)	
3	I/O		Data2	
4	I/O		Data3	
5	I/O		Data4	
6	I/O		Data5	
7	I/O		Data6	
8	I/O		Data7	
9	I/O		Data8 (MSB)	
10	O	nACK	PtrClk	PeriphClk
11	O	Busy	PtrBusy	PeriphAck
12	O	PError	AckDataReq	nAckReverse
13	O	Select	Xflag	Xflag
14	I	nAutoFd	HostBusy	HostAck
16-17		Not defined		
15		GND		
18	O	Peripheral Logic High (pull up to +5 V at 1 kilohm)		
19-30		GND		
31	I	nInit	nInit	nReverseRequest
32	O	nFault	nDataAvail	nPeriphRequest
33		Not defined		
34		Not defined		
35		Not defined		
36	I	nSelectIn	IEEE 1284 Active	IEEE 1284 Active

UP-D5500 supports Compatible, Reverse Nibble, and ECP modes of the two-way parallel interface standard (IEEE STD 1284-1994).

Design and specifications are subject to change without notice.

Troubleshooting

The following troubleshooting checks will help you correct the most common problems you may encounter with your unit. Before proceeding with these trouble checks, first check that the power cord is firmly connected. Should the problem persist, unplug the unit and contact your Sony dealer or local authorized Sony service facility.

Symptoms	Possible causes and remedies
Nothing appears in the printer window display	• The POWER switch of the printer is not set to ON. → Set the POWER switch of the printer to ON. • Connections may not be correct. → Check connections and rectify, if necessary. (see page 14)
The printer does not print.	• An error message appears on the display. → Perform the steps described in "Error Messages" on page 38. • Paper that cannot be used with the printer has been loaded. → Load the correct paper. (see page 35) Use only ink ribbon and paper for this printer. • The paper is not loaded correctly. → Check which side of the paper is the printing side, then load the paper again. (see page 19).
The printout color is very pale.	The paper is not loaded correctly. → Check which side of the paper is the printing side, then load the paper again. (see page 19).

Troubleshooting (continued)

Error Messages

If a problem occurs, the ALARM lamp lights and an error message stating the problem appears in the printer window display. Note the message and perform whatever action is necessary to solve the problem.

Error messages	Possible causes and remedies
BUSY PRINTING	The printer is printing, preventing any other operation. → Wait until the printer finishes printing, then retry the operation.
HEAD IN COOLING	The thermal head has overheated. → Leave the printer until the head cools down and this message disappears.
NO IMAGE IN DATA	No image data is stored in the printer memory. → Transfer the image data from your computer.
NO PAPER	The ink ribbon has been exhausted. → Fit a new ink ribbon. (Ink ribbons cannot be reused.) (see page 16)
NO RIBBON	• The ink ribbon is crumpled in the ink ribbon holder. → Remove the ink ribbon cartridge and reload the ink ribbon into the ink ribbon holder. (see page 16) • The ink ribbon has been torn. → Repair the tear with transparent tape. (see page 18) • The ink ribbon cartridge is loaded into the printer, but the ink ribbon has not been loaded into the ink ribbon holder. → Load the ink ribbon into the ink ribbon holder and reload it. (see page 16)
NO RIBBON & PAPER	The ink ribbon cartridge is loaded in the printer, but the ink ribbon has not been loaded into the ink ribbon holder, and no paper has been loaded into the paper tray. → Load the ink ribbon into the ink ribbon holder, then load the ink ribbon cartridge, and load the paper into the paper tray. (see pages 16 and 19)
PAPER JAMMING	The paper has jammed. → Remove any jammed paper from the printer. (see page 39)
REMOVE PAPER	The maximum number of printouts has accumulated on the paper cover. → Remove the printouts from the paper cover.
PAPER MISMATCH	The ink ribbon and paper are not compatible. → Use a valid combination of paper and ink ribbon. (see page 35)
RIBBON END	The paper has been exhausted. → Load paper into the paper tray. (see page 19)
RIBBON ERROR	The ink ribbon is not loaded in the ink ribbon holder. → Load the ink ribbon into the holder. (see page 16)
SENSOR MOTOR ERR	Sensor trouble or motor trouble has occurred. → Turn off the power immediately and contact your Sony service facility or your Sony dealer.

If the paper jams

If the paper jams after pressing the PRINT button, the message "PAPER JAMMING" appears on the video monitor and in the printer window display. Follow the steps below to remove the jammed paper.

1 Open the front panel.

2 Remove the paper cover.
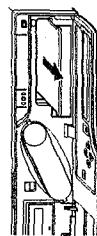
> **Note**
> If any printouts have been ejected to the paper tray, remove them before removing the paper tray.

3 Check whether any paper is jammed inside the printer. If you find a jammed sheet, slowly pull it into the printer tray.
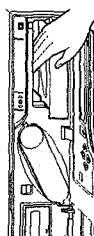
> **Note**
> Never attempt to pull a jammed sheet down, up, backwards, or forwards; the sheet may tangle or tear.

4 Remove the paper tray.
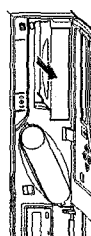
5 Load the paper into the paper tray correctly.
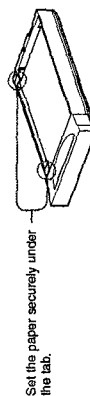
Set the paper securely under the tab.

> **Notes**
> • Do not reuse the paper put back in step **3**. Discard that paper.
> • Use only paper recommended in this manual.

6 Reinsert the paper tray and paper cover, then close the front panel.

Printer Driver

Operating Guide   Page 16

This guide describes installation and use of the Macintosh Printer Driver.

UP-D5500 Series

SONY.

Contents

16   Contents

• Macintosh, Macintosh II, and Color QuickDraw are registered trademarks
  of Apple Computer Company
• Photoshop is a registered trademark of Adobe Systems

Using the Printer Chooser Driver

English

The Chooser Driver software enables printing on the UP-D5500 Series using the standard print functions of application programs.

Before using the Printer Chooser Driver

■ System Requirements

The following conditions are required for using the Macintosh Chooser Driver:
- A Macintosh with 32-bit Color QuickDraw
- At least 8 MB of free memory.
- At lest 30 MB of free hard disk space.
- Mac OS System 7.1 or later.

The driver operates faster if more free memory is available, so we recommend having as much memory as possible.

Note
This Macintosh Printer Chooser Driver does not support QuickDraw GX.

Installing the Chooser Driver

Install the Printer Chooser Driver by the following procedure.

1. Insert the supplied "PRINTER DRIVER for Macintosh" floppy disk into the Mac's floppy disk drive.

2. Double click the disk icon to open the window.

3. Double click the "Chooser" folder to open the window.

4. Double click the "English" folder to install the English version or the "Japanese" folder to install the Japanese version.

5. Drag the "UP-D5500" icon to the Extensions folder inside the System Folder.

6. If you expect to do background printing, copy the "UP-D5500.Background" to the hard disk (it does not need to be in the System folder).
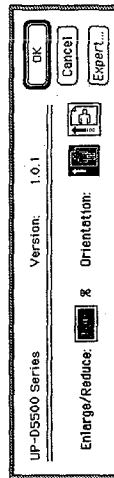
Printing

Choosing the UP-D5500

Use the Chooser to select the UP-D5500 Series before printing with it the first time, and when switching back to the UP-D5500 Series after using another printer.

1 Select "Chooser" from the Apple menu to display the Chooser window.

2 Select the UP-D5500 icon from those at the left side of the window to display the name of the UP-D5500 in the list box at the right side of the window.

3 Select the name of the UP-D5500 in the list box to display the SCSI connection address.

4 Close the Chooser window.

Page Setup

Page Setup sets the paper feeding orientation and magnification or reduction percentage.

1 Select "Page Setup" from the File menu to display the Page Setup dialog box.

UP-D5500 Series   Version: 1.0.1   OK
                                         Cancel
Enlarge/Reduce: [   ] %   Orientation: [ ][ ]   Expert...

2 See below to set the selection items as required.

3 Confirm your settings and click the "OK" button to close the dialog box.

About the Page Setup Items

Page Setup dialog box selections are described below.

• Enlarge/Reduce

Enter the desired magnification or reduction percentage from the keyboard. You can enter any whole number between 25 and 400 (%). For example, if the paper size specified in the software is larger than the paper size in the printer, the image will be reduced when printed.

The printed image is magnified or reduced by the specified percentage both horizontally and vertically. For example, specifying 200% produces a printed image of twice the height and twice the width of the size specified in the software, so the printed image has four times the area.

• Orientation

Specifies whether to print the image in tall (portrait) or wide (landscape) orientation.

• Expert...

Clicking the "Expert..." button displays the following Expert dialog box.

UP-D5500 Series   Current Status   Cancel   OK
Dark level   Red   0
Light level   Green 0
Sharp level   Blue   0
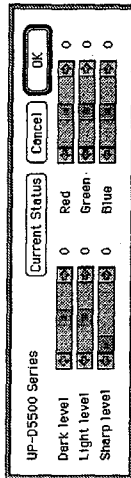
• Contrast and Color Level

Clicking the "Current Status" button displays printer setup information. Two sliders adjust contrast. The Dark level slider adjust the black level, and the Light level slider adjusts the white level. These sliders can be set to levels between –7 and +7.

The Sharp level slider adjusts the sharpness of edges of objects in the printed image. This slider can be set to levels between 0 and +7.

The color level sliders adjust the level of each color, from –7 to +7.

■ **Printing**

Use the following procedure to print from an application to the UP-D5500 Series.

1 Select "Print" from the File menu to display the Print dialog box.

```
UP-D5500 Series
Copies: [  ]   Pages: ◉ All  ○ From: [1]  To: [1]
              Print: ◉ Now   ○ Background / Later
                                          OK
                                        Cancel
```
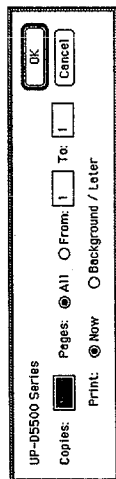
2 See below to set the selection items as required.

3 Click "OK" to start printing. Click "Cancel" if you want to cancel printing.

About the Print Setup Items
Print dialog box selections are described below.

• **Copies**
Specifies how many copies to print.

• **Pages**
Specifies which pages to print.
"All" selects all pages of the current document in the application.
"From" selects the page to print first, and "To" specifies the page to print last. Page numbers are entered from the keyboard.

• **Print**
Specifies print timing.
"Now" causes the document to print as soon as you click "OK".
"Background / Later" starts background printing when you click "OK".

Background Printing

Printing with this driver is usually done in the foreground, so the computer cannot be used for other things while printing. However, you may want to be able to work in the foreground while printing in the background, for example, to write a manuscript for a speech while printing images for slides. You would used background printing to do this.

■ **System Environment for Background Printing**

Background printing requires that UP-D5500.Background be installed with the Chooser Driver (page 17), and the following condition:
• There must be at least enough free space on the hard disk to hold the document to be printed (depending on the particular document).

■ **Outline of Operation**

When UP-D5500.Background is loaded, printing from an application copies the document to a spool file. With foreground printing, printing starts immediately, and the application cannot be used until printing finishes. With background printing, the application can be used again as soon as the document is copied to the spool file, which is automatically deleted when background printing finishes.

Note
Do not use the Photoshop Plug-in Module while printing in the background, as this may cause the computer to hang.

Using the Photoshop Plug-in Module

The Photoshop Plug-in Module is a program that allows printing images from the Photoshop photographic touch-up program. When printing an image, you can also display printer color adjustments, print size and other printing conditions. This section describes the installation and basic operation of the Photoshop Plug-in Module.

Before Using the Photoshop Plug-in Module

■ System Requirements (Operating Environment)

The following conditions are required for using the Photoshop Plug-in Module.
- At least 8 MB of free memory.
- Mac OS System 7.1 or later.
- Adobe Photoshop version 2.5 or later.
- The driver operates faster if more free memory is available, so we recommend having as much memory as possible.

In Case of a Problem

If a problem occurs while using this kit, please check the following.

■ During Installation

- **If the UP-D5500 icon does not appear in the Chooser window:**
  - Check by scrolling the icon window.
  - Check that the Printer Driver is present in the System Expansion Folder of the current System Folder.
  - Close the Chooser window once, and re-open it.
  - Restart the Macintosh.
  - Verify that QuickDraw GX has not been installed.

- **If the name of the UP-D5500 does not appear in the list box (no SCSI address displayed) when you click the UP-D5500 icon in the Chooser window.**
  Turn off the Macintosh and connected devices, and check the SCSI cable connections.

■ While Printing

- **You get a "Printer not ready" error dialog box when trying to print.**
  - Is the printer's power cord connected properly?
  - Is the printer connected to the Mac properly?
  - Is the printer selected, and is it ready to receive data?
  - Is there enough paper, or is there a paper jam? See the Printer Operating Manual for descriptions of the error displays.

■ While Background Printing

- **During background printing, the foreground application does not respond quickly.**
  The processor is shared by foreground and background operations, so foreground operation is normally slowed by background printing.

■ Others

- **See the README file for important updates to the documentation, such as application compatibility issues.**

Installing the Plug-in Module

Install the Plug-in Module by the following procedure.

1 Insert the supplied "PRINTER DRIVER for Macintosh" floppy disk into the Mac's floppy disk drive.

2 Double click the disk icon to open the window.

3 Double click the "Plug-in" folder to open the window.

4 Double click the "English" folder to install the English version, or the "Japanese" folder to install the Japanese version.

5 Drag the "UP-D5500 Export" icon to the Photoshop Plug-in folder.

Note
When you finish the above installation, restart Photoshop to enable the Plug-in Module.

Printing an Image

To print image data, open the image file with Photoshop, then bring up the Plug-in Module main dialog box.

■ Displaying the Main Dialog Box

To print an image, display the main dialog box as follows:

1 Double click the Photoshop icon to run Photoshop.

2 Open the image file to print (this software supports 3-channel RGB and 1-channel grayscale images).

3 Select "Export" on the File menu, and select "Sony UP-D5500 Series Export..." to display the Sony UP-D5500 Series main dialog box.

```
Sony UP-D5500 Series

Copies:            Printer Information:
                   Ribbon Remaining   : 138
Orientation        Ribbon Type        : Paper
                   Printer ROM Version : 0.06
                   Printer Status     : Ready

Calibrate Printer   □ Mirror Image   □ Resize to Fit

                                        Print
                                        Cancel
                                        Reprint
```
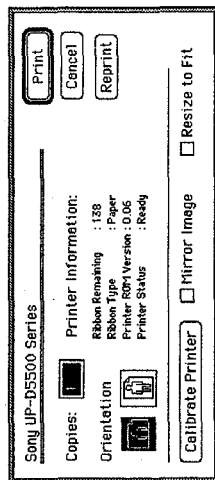
Note
If the printer is not turned on, or if you attempt to print without having the printer cable connected, the following message appears:
"No response from UP-D5500.
Check the power and connection cables."

Main Dialog Box Functions

From the main dialog box, you can check and adjust the condition of the image data output to the printer, and control printer operation.

Copies
Specifies the number of copies to print. You can enter up to 9.

Orientation
Selects either landscape (wider icon) or portrait (taller icon). By default, the printer automatically selects portrait with taller images and landscape with wider ones.

Printer Information
Displays the current printer conditions. The printer is ready to print when the Printer Status is "Ready". Other possible conditions are "Check Paper" and "Check Ribbon Cassette". Other displayed items are how many prints can be made on the remaining ribbon, the type of ribbon, and the ROM version in the printer.

Mirror Image
Prints a mirror image when this box is checked.

Print
Prints the image.

Cancel
Closes this dialog box without doing anything else.

Reprint
Clicking here prints an image previously stored in the printer memory.

Resize to Fit
Automatically magnifies or reduces the image to the maximum size that can be printed on the UP-D5500 Series.
The transformation system is bi-linear.

Calibrate Printer
Clicking here displays the Calibrate Printer dialog box for adjusting the printer colors.

Calibrate Printer Dialog Box Functions
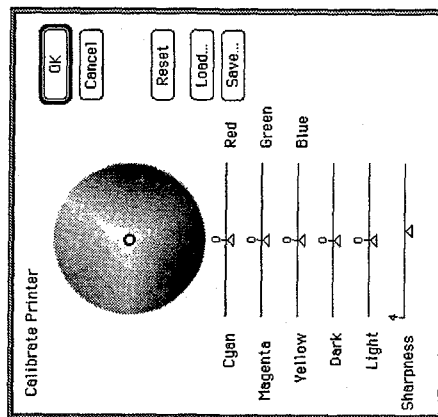
Parameter Adjustment Ranges

Cyan-Red	-7 to +7
Magenta-Green	-7 to +7
Yellow-Blue	-7 to +7
Dark	-7 to +7
Light	-7 to +7
Sharpness	0 to +7

Button Functions
Each button works as follows:

• **OK**
Sends modified parameter values to the printer.

• **Cancel**
Returns to the main dialog box. Any changes to the parameters are ignored.

• **Reset**
Returns all parameter values to the printer defaults.

• **Load...**
Loads previously saved color calibration settings.

• **Save...**
Saves the current dialog box settings to disk.

■ About the Printer Status Dialog Box

Selecting "Sony UP-D5500 Series Export..." from the "Export" when starting to print, or while printing, brings up the Printer Status dialog box, which displays the current printer status. You can click the "Cancel Printing" button to interrupt the print job, or click "OK" to close the Printer Status dialog box and return to the Photoshop window.

```
Document 'untitled' is being printed.
Printing Yellow
Prints Remaining   1

   [ Cancel Printing ]         [ OK ]
```
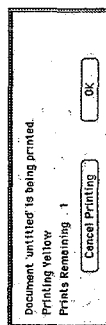
If the Printer Status dialog box is not visible when you want to cancel printing, select "Sony UP-D5500 Series Export..." from the "Export" to redisplay the dialog box, and click the "Cancel Printing" button.

SECTION 2
SERVICE INFORMATION

2-1. BOARD LAYOUT

Switching Regulator

SE-45 Board

IF-652 Board

Thermal Head

SE-47 Board

Liquid-crystal display element unit

PRT-2 (B) Board

SE-53 Board

SY-245 Board

SE-373 Board

SE-54 Board

SU-17 Board

SU-18 Board

SE-44 Board

SE-46 Board

SE-48 Board

SU-16 Board
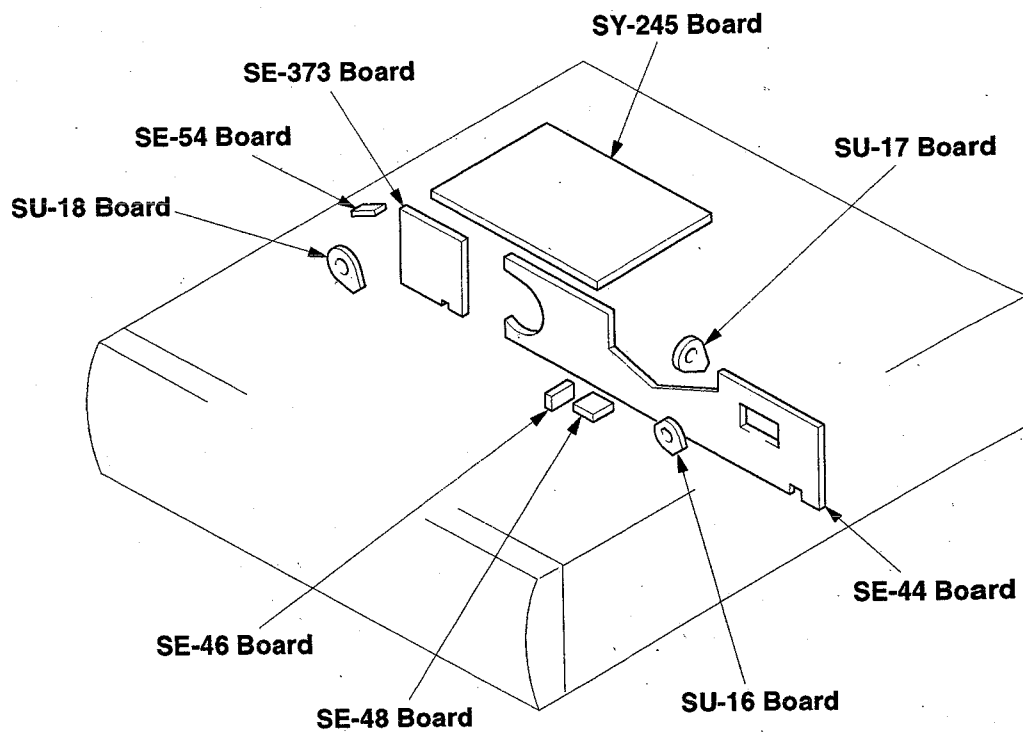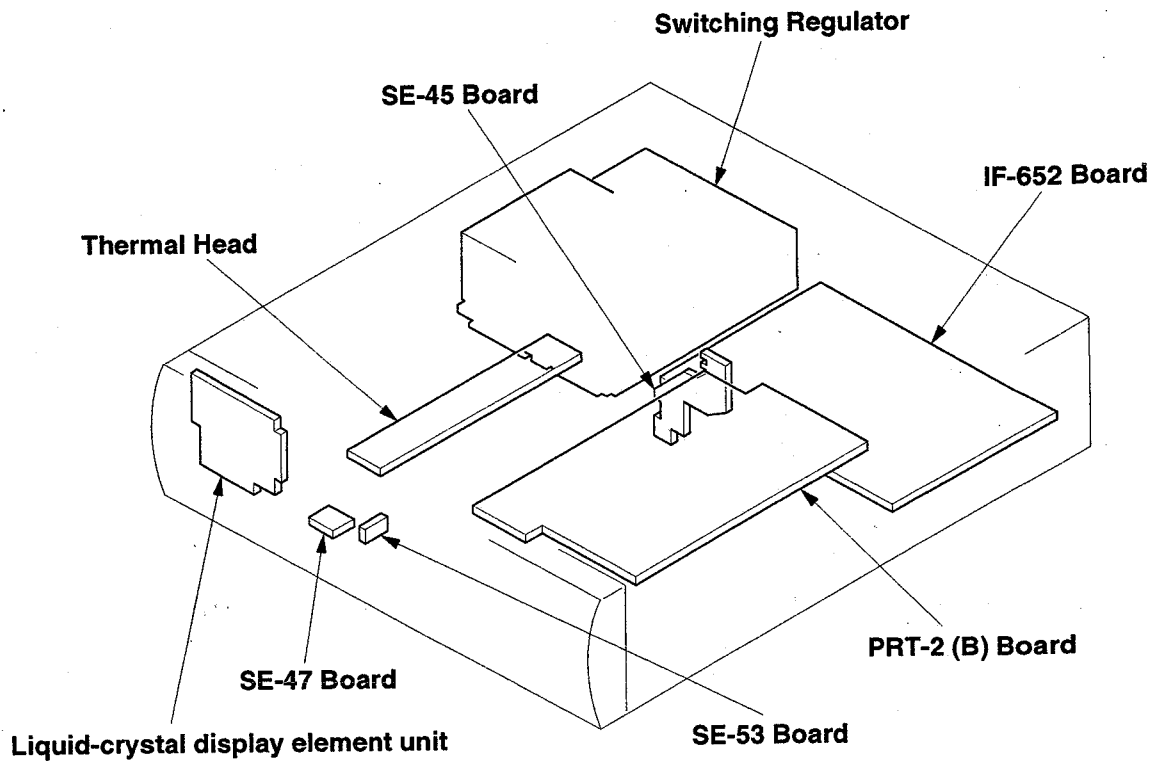
2-2. DISASSEMBLY

2-2-1. Removal of the Cabinet Assembly

❶ Press the cartridge button in the direction indicated by arrow Ⓐ and take out the cartridge assembly.

❷ Delivery tray

❸ Paper feed tray

❹ Five screws (Screw M3 on case)

2-2-2. Removal of the Front Panel Assembly

❷ Mechanical cover

❶ Five screws (BVTT 3×6)

❸ Flat cables (CN402 20-pin and CN401 12-pin)

❽ Front panel assembly

❹ Flat cables (CN401 9-pin)

❻ Two screws (PSW 3×6)

❼ Two Hooks

❺ Two screws (BVTT 3×6)
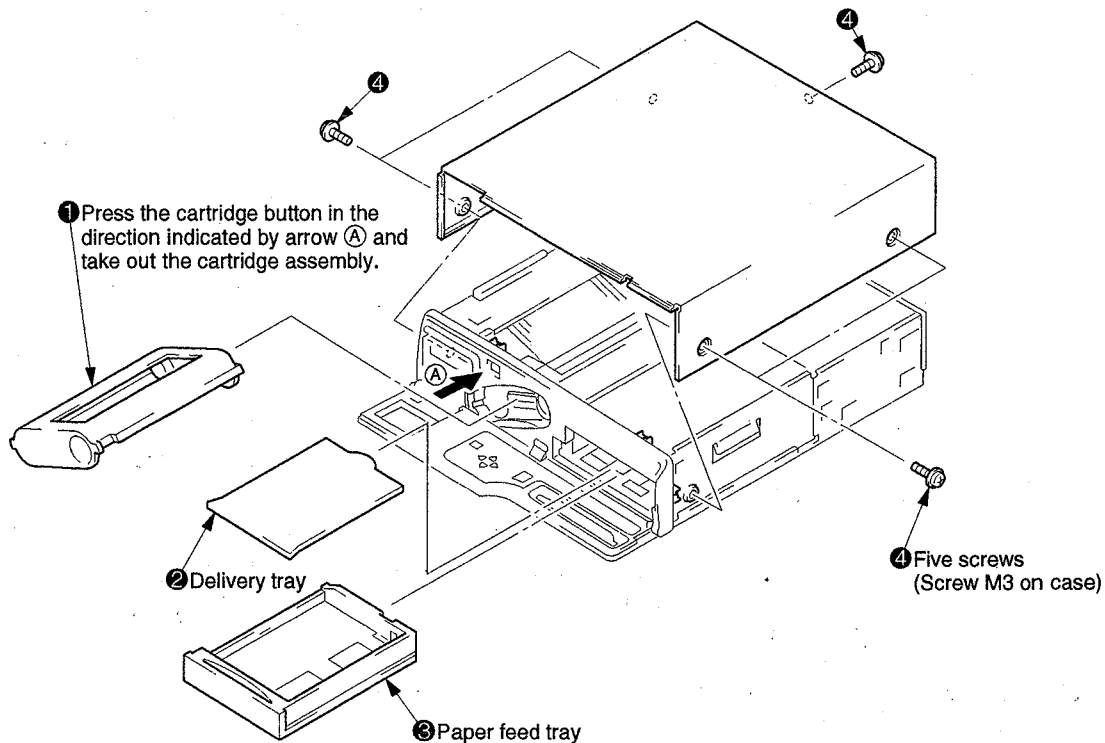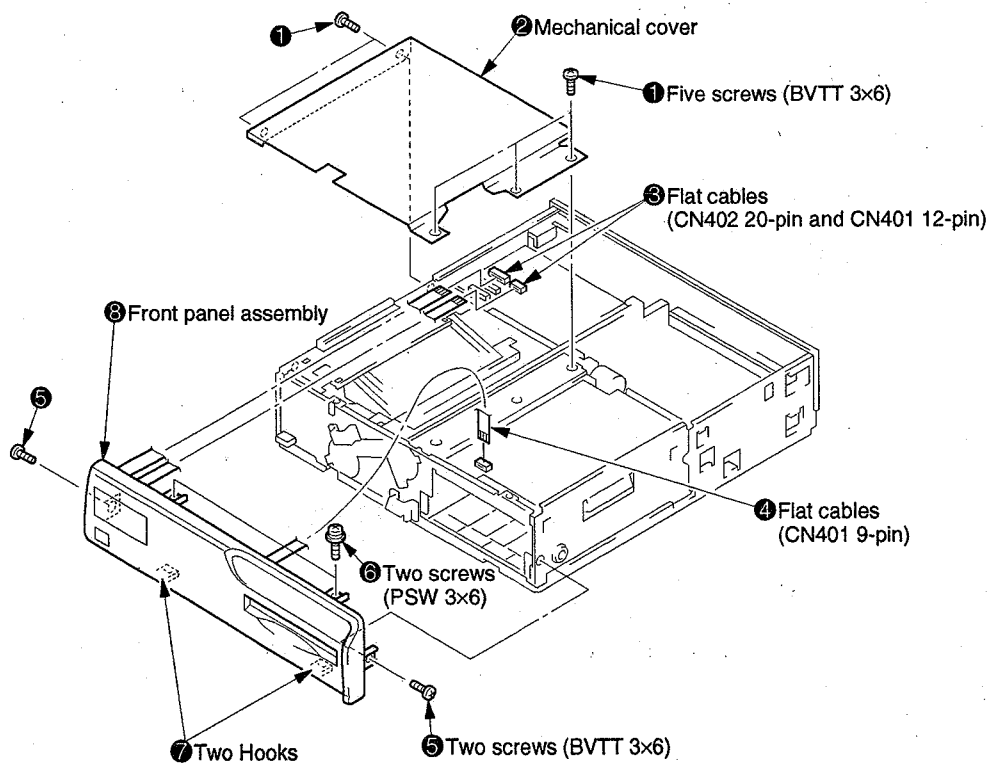
2-2-3. Removal of the Mechanical Block

❶ Flat cables and connectors
(CN301 13-pin, CN201 14-pin,
and CN001 13-pin)

❸ Rod stopper

❷ Flat cable
(CN801 17-pin)

❺ Mechanical block

❹ Seven screws
(BVTT 3×6)

❻ Power switch rod
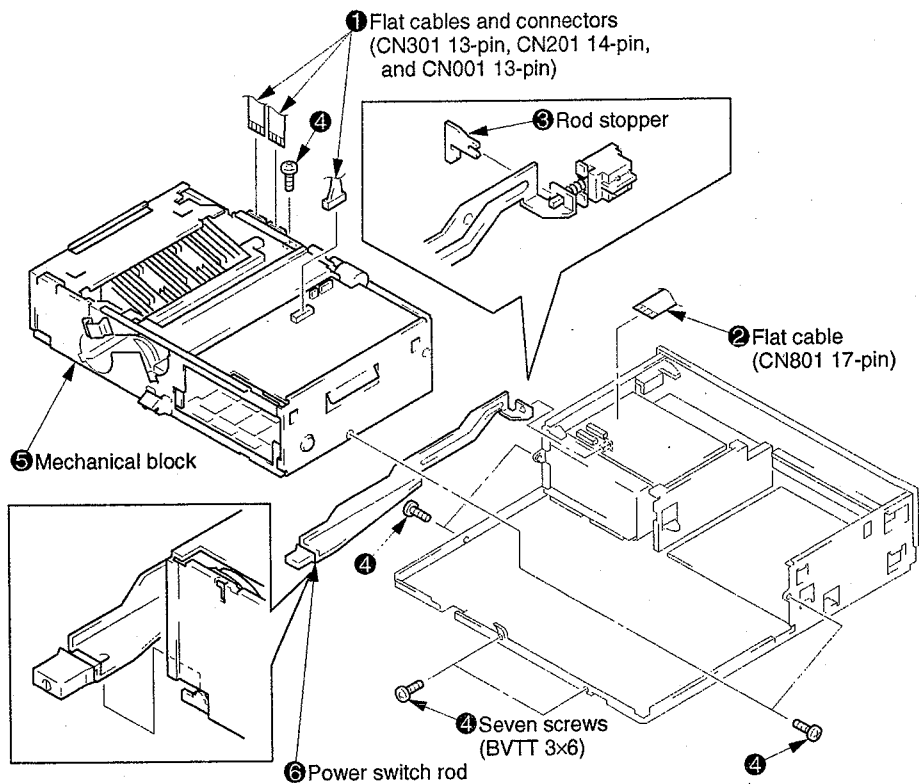
2-2-4. Removal of the SY-245 Board

❸ Four screws (BVTT 3×6)

❶ (CN801 18-pin)

❹ SY-245 board

❷ Connector (CN901 12-pin)

❸

❶ (CN951 13-pin)

❶ (CN201 24-pin)

❶ Four flat cables
(CN1 18-pin)

2-3
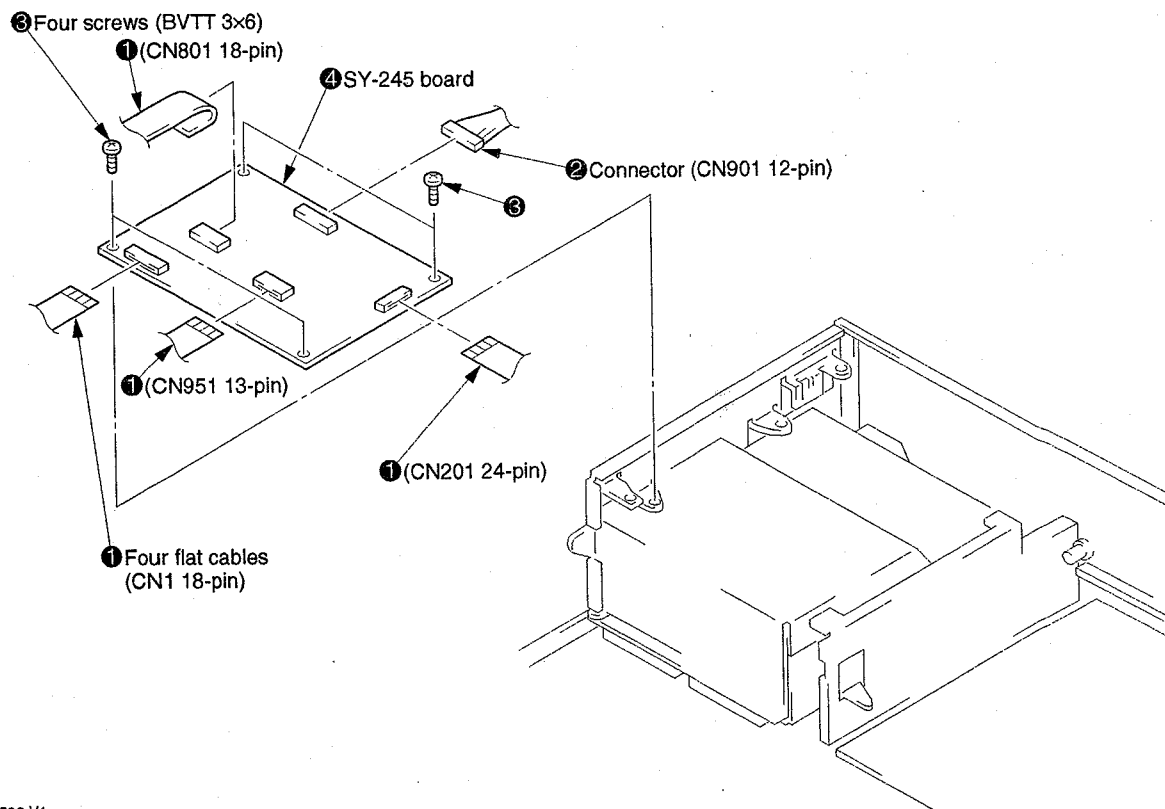
2-2-5. Removal of the Switching Regulator

❷ Remove the switching regulator from two hooks (Ⓐ and Ⓑ).

Ⓑ

Ⓐ

❶ Four screws (PS 3×6)
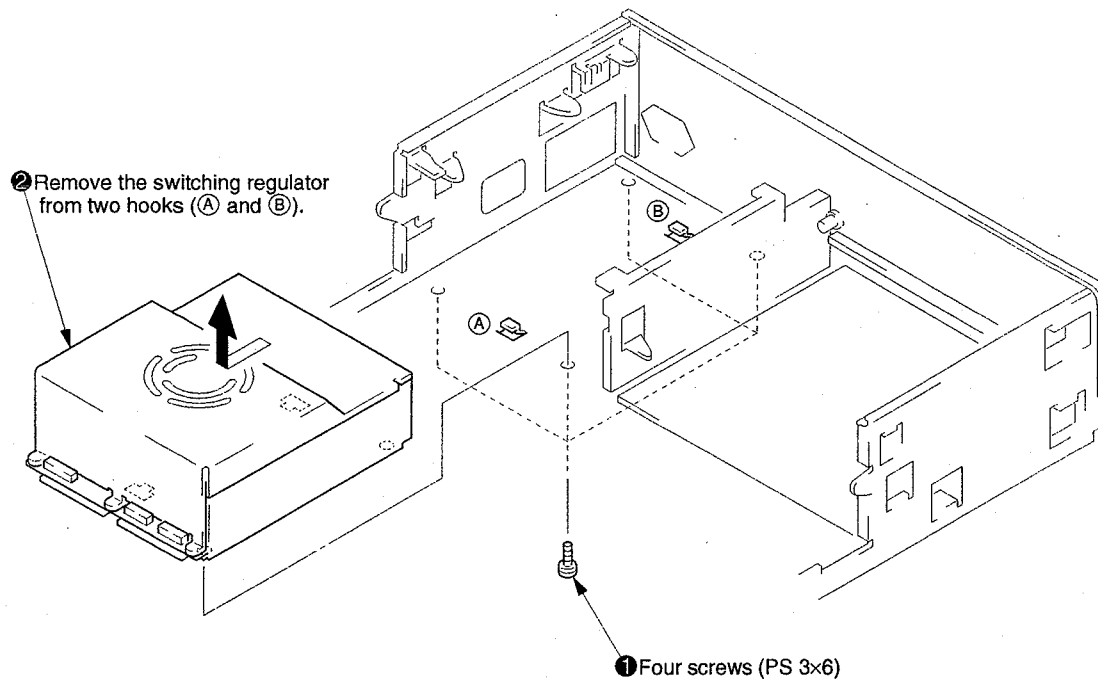
2-2-6. Removal of the PRT-2(B) Board

❷ Flat cables and connectors
(CN801 28-pin, CN1111 3-pin, CN1112 6-pin,
CN1113 2-pin and CN1114 2-pin)

❸ Four screws (with washer: M 3×7)

❸

Ⓐ

Open the RMT-2 (B) board
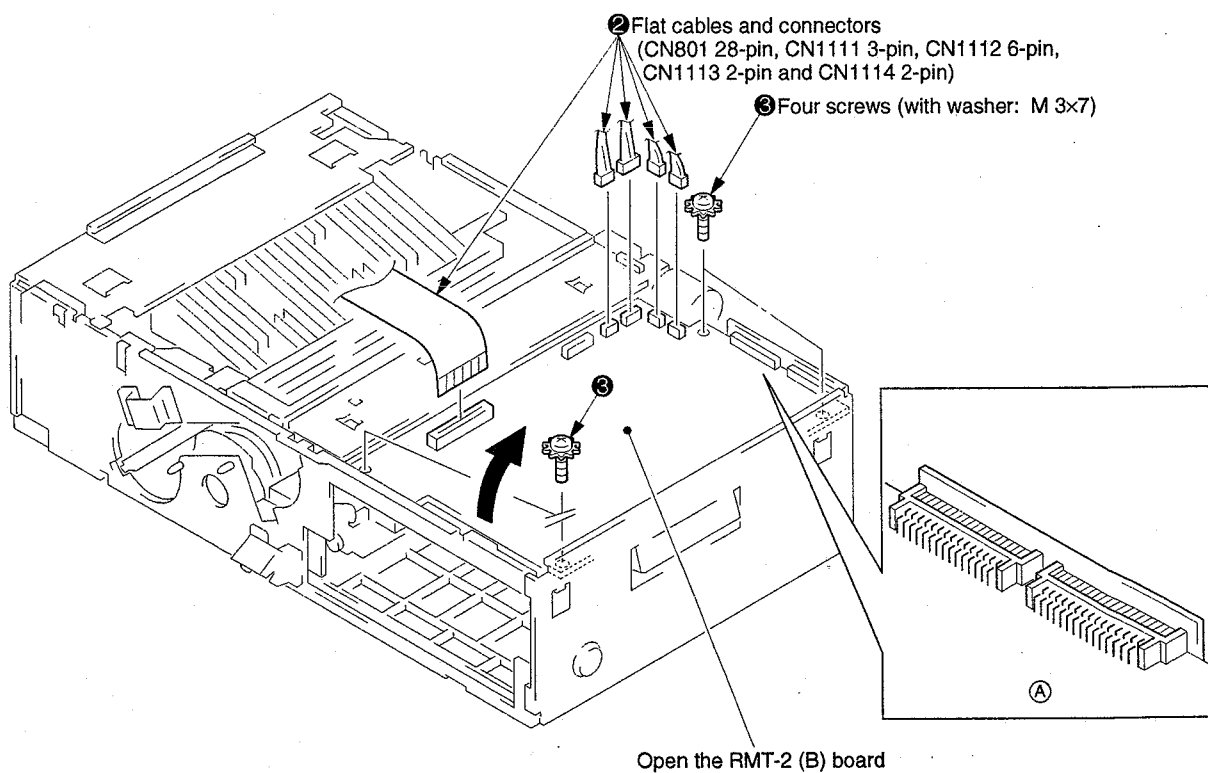
2-2-7. Removal of the PRT-2(B) and SE-44 Boards

❺ Open the RMT-2 (B) board

❸ Screw
(BVTT 3×12)

❹ SE-44 board

❶ Connectors
(CN1107 5-pin, CN1103 6-pin,
CN1108 3-pin, CN1104 2-pin,
CN1106 6-pin and CN1105 2-pin)

❻ Paper eject cover

❷ Two screws (BVTT 3×6)
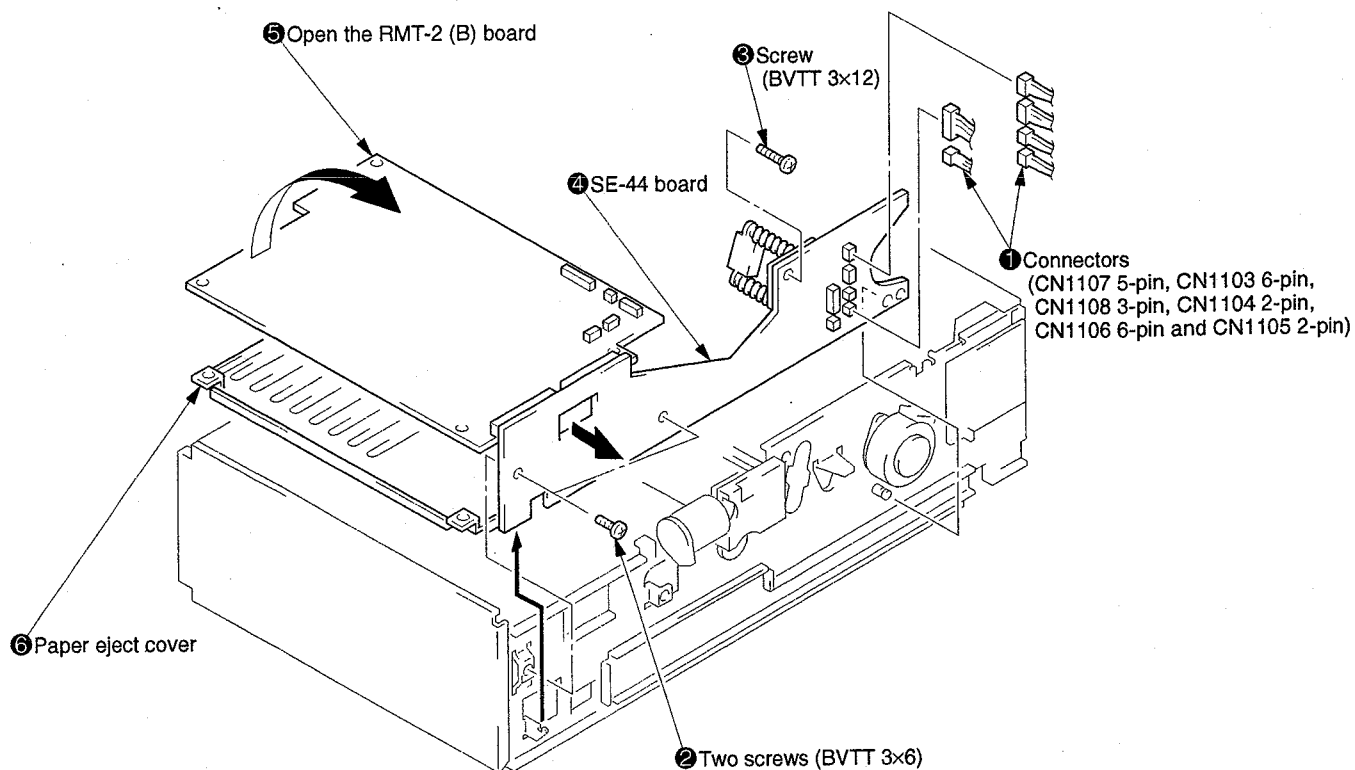
2-2-8. Removal of the Stepping Motor and Ribbon Motor

❺ Two screws (PS 3×4)

❽ Warm shaft cap

❻ Ribbon motor   ❼ Warm assembly

❶ Two screws (BVTT 3×6)

❷ Stepping motor

❸ Screw (BVTT 3×6)

❹ Ribbon motor assembly

2-2-9. Removal of the Fan

③ Two screws (PSW 4×25)

④ Fan

② Mechanical chassis (L)

① Five screws (BVTT 3×6)
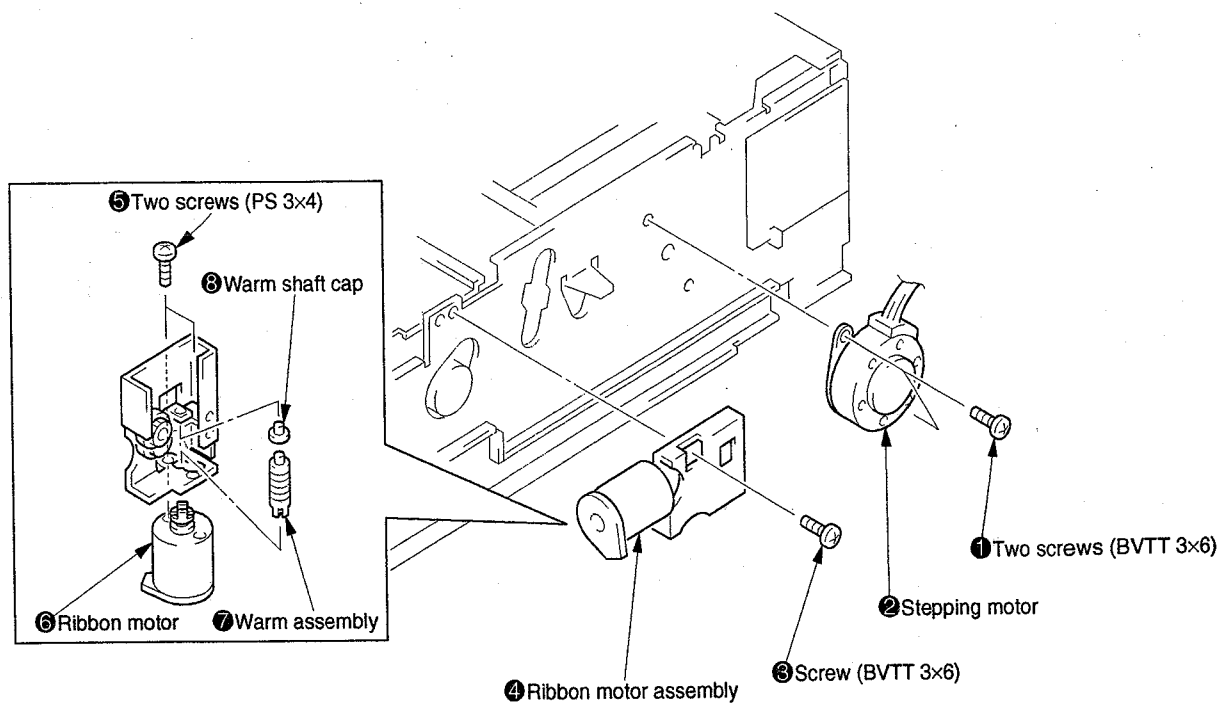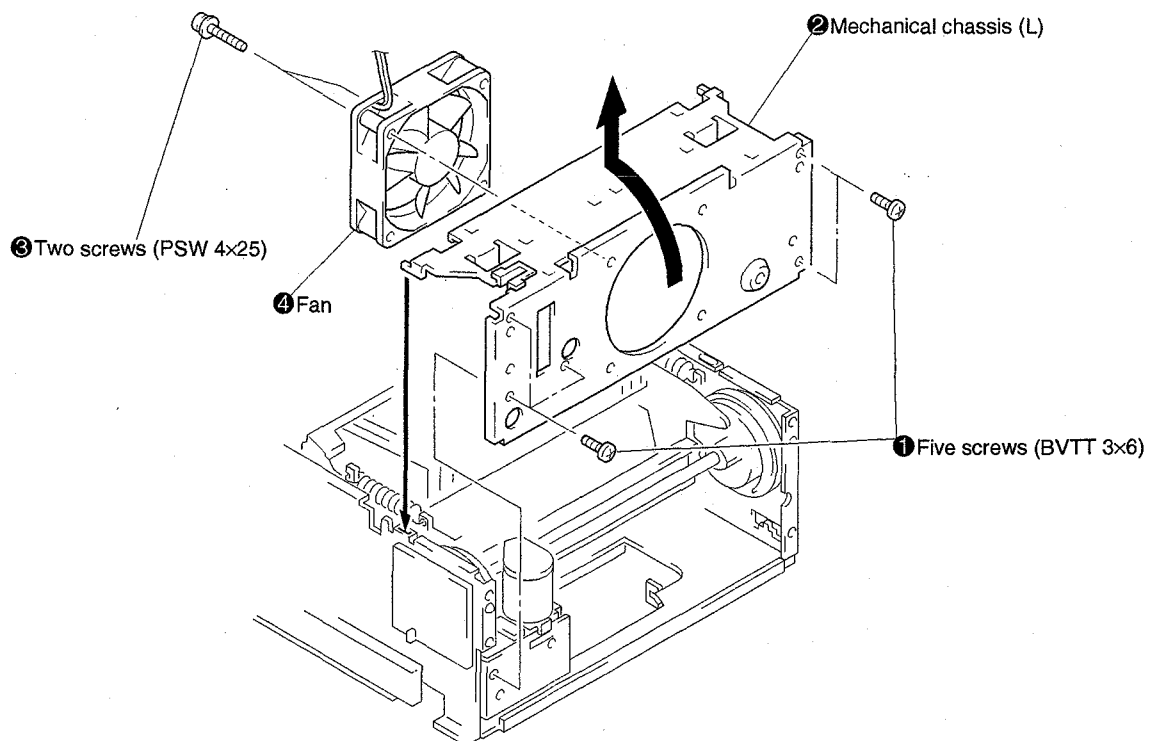
2-2-10. Removal of the System Motor

② System motor assembly

⑧ System motor

⑥ System motor pulley

⑤ FG fin

⑦ Screw (PS 3×4)

④ SE-54 board

③ Screw (PS 3×6)

① Screw (BVTT 3×6)
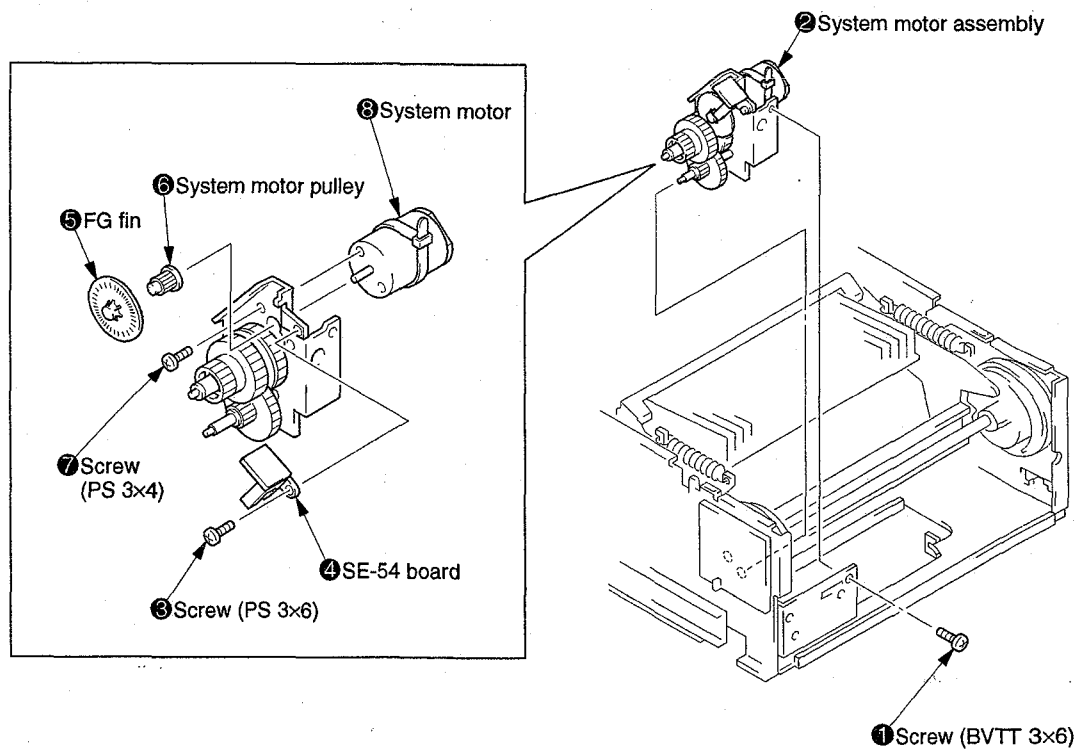
2-2-11. Removal of the Mechanical Chassis

❶ Screw (BVTT 3×6)

❸ Cartridge guide (R) assembly

❾ Screw (BVTT 3×6)

❿ SE-26 board

⓫ Sensor reflector assembly

⓬ Two screws (BVTT 3×6)

⓭ Mechanical chassis (B) assembly

❷ Two screws (BVTT 3×6)

❼ Stopper 90 and front spring

❻ Two screws (BVTT 3×8)

❽ Mechanical chassis (F) assembly

❹ Four screws (BVTT 3×6)

❺ Mechanical chassis (R)
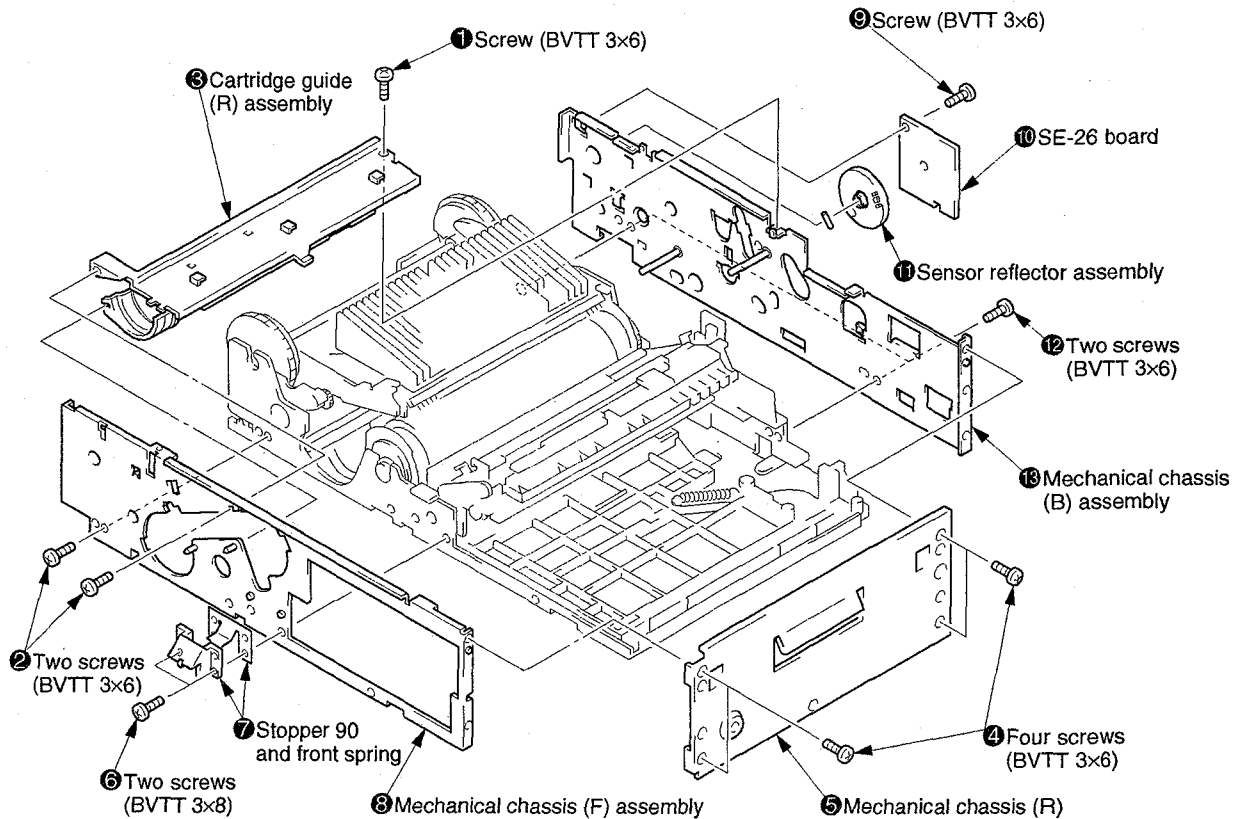
2-2-12. Removal of the Thermal Head

❶ Two screws (BVTT 3×6)

❷ Head pressure

❺ Heat sink

❹ Three screws (PSW 3×6)

❻ Two screws (PSW 3×6)

❼ Head holder

❽ Thermal head

❸ Head block

2-2-13. Removal of the L Motor

❸ Paper gear A　　**❷** Belt

❺ L motor

❹ Two screws (PS 3×4)

Ⓑ

Ⓐ

❶ Unlock the delivery block assembly in the direction indicated by arrow Ⓐ and remove it in the direction indicated by arrow Ⓑ.

2-2-14. Removal of the IF-652 Board

❶ Two screws (BVTT 3×6)

❸ IF-652 board

❷ Two screws (BVTT 3×6)
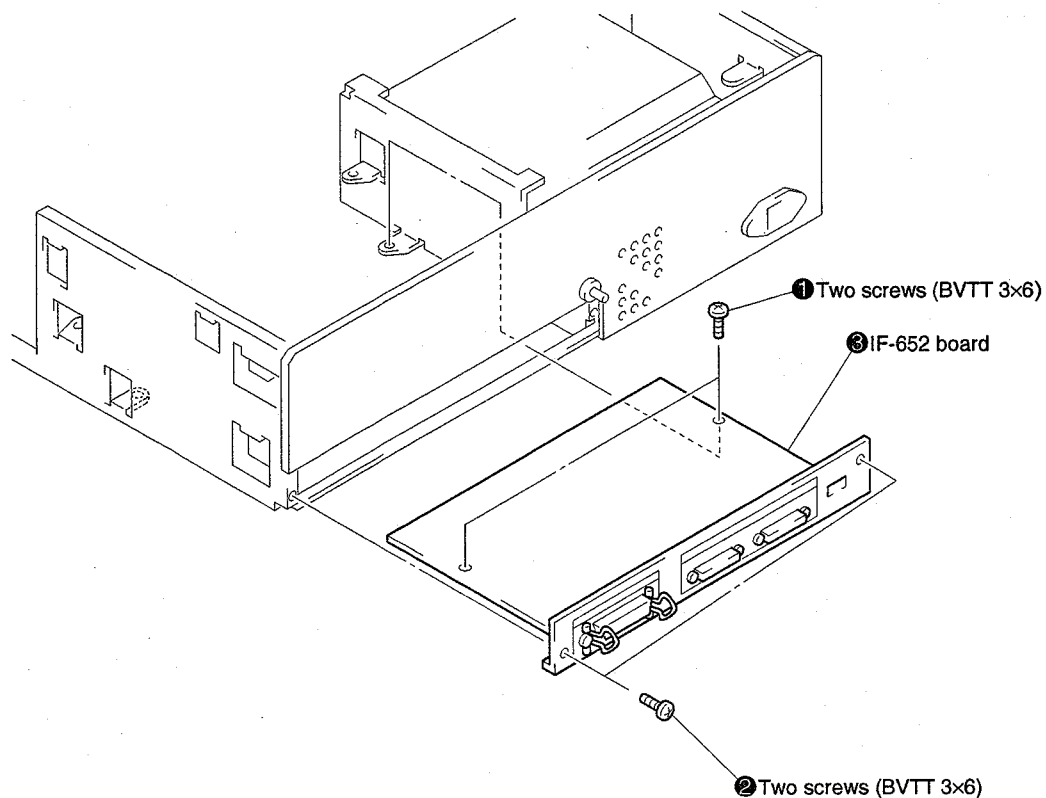
2-3. Confirmation between UP-D5500 and the personal computer

• The driver soft of UP-D5500 is downloaded from home page of internet.
It is assembled to the personal computer. (Select the driver soft for Windows.)
Perform the print for test.

http://www.hq.sony.co.jp/index-j.htm/ .... Access
   ↓
SONY DRIVE .... Appeared
   ↓
Service Area .... Select
   ↓
Software Download .... Select
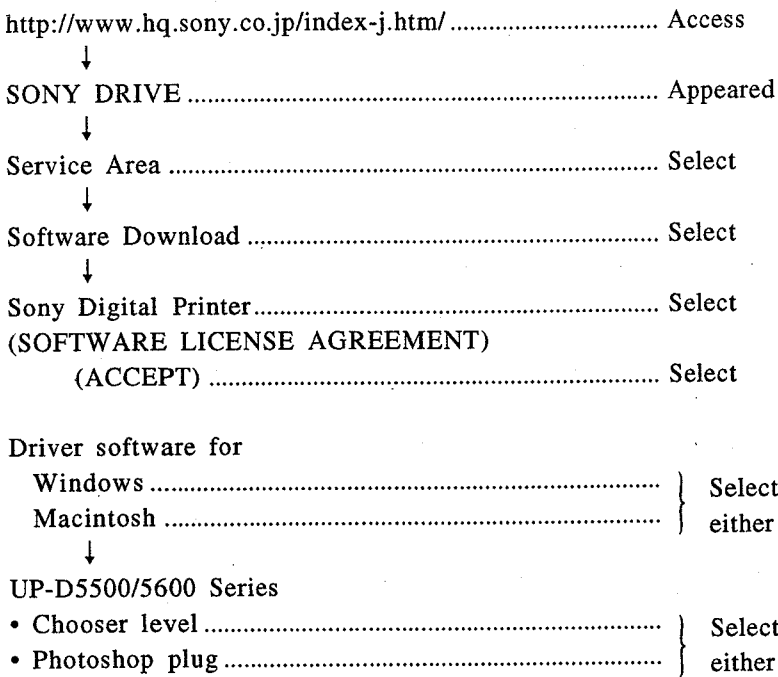   ↓
Sony Digital Printer.. Select
(SOFTWARE LICENSE AGREEMENT)
     (ACCEPT) .... Select

Driver software for
  Windows .... } Select
  Macintosh .... } either
   ↓
UP-D5500/5600 Series
• Chooser level .... } Select
• Photoshop plug .... } either

SECTION 3
ELECTRICAL ADJUSTMENT

- COMPOSITE S.G
  FULL FIELD 75% COLOR BAR WHITE REF 100IRE (1410,1411,etc)
- S-VIDEO S.G (TSG-130,131,etc)
  FULL FIELD 75% COLOR BAR WHITE REF 100IRE(TSG130,131,etc) ANTI
  PAL (435P,etc)
- RGB S.G (TSG-300,etc)
  STEP
- Terminate the monitor output terminal in 75 ohms.
- UP-D5500
  - EVIDEO   75-ohm switch : ON
  - ERGB   75-ohm switch : ON
- Set the NTSC/PAL switch according to the corresponding mode.
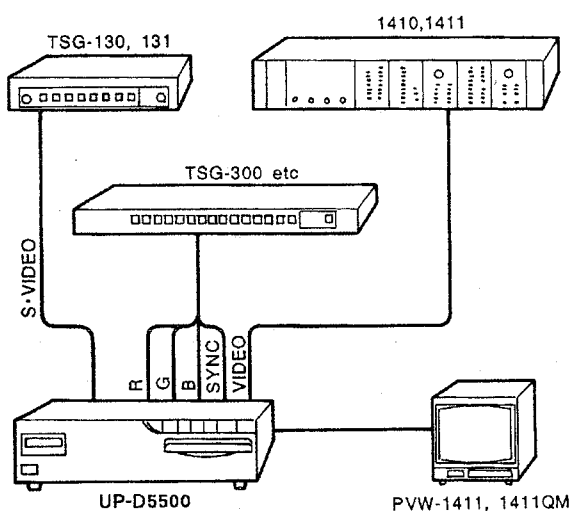
- How to enter the service mode (How to output atest signal)

(1) Press the [←] and [→] keys simultaneously and turn on the power switch. The unit is then
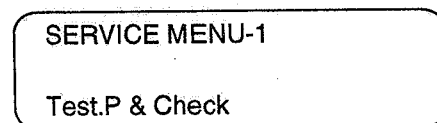   put into the service mode.

    Indication of service mode

    ```
            S

    Q1    Ready
    ```
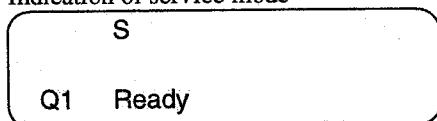
(2) Press the [MENU] button to display the MENU screen. (Last indication picture is indicated.)

    ```
    SYSTEM SETUP

    SYSTEM/prm/cadj
    ```
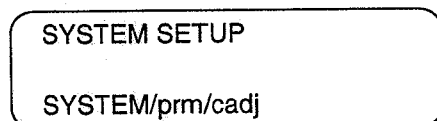
(3) Select following indication by using [←] and [→] keys.

    ```
    SERVICE MENU-1

    Test.P & Check
    ```

3-1

(4) Move the cursors [↓] and [↑] to the CPU DW : SET(V) position, select a test signal using the [←] and [→] keys, and press the [EXEC] key. The test pattern is printed by pressing print key.

CPU DW   :

            STEP (V)
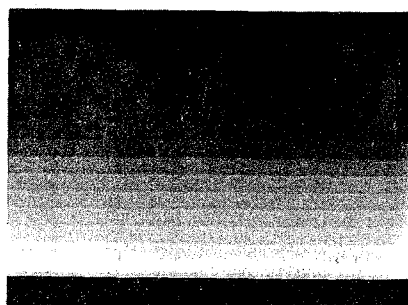
① STEP(V)
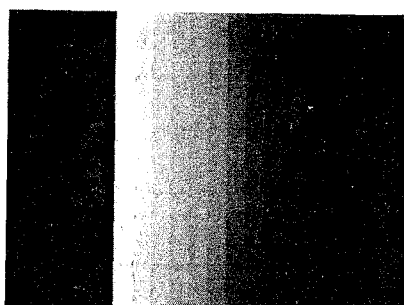
② STEP(H)
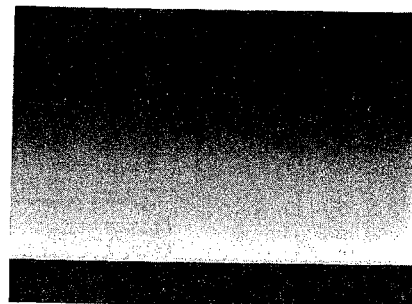
③ RAMP(V)
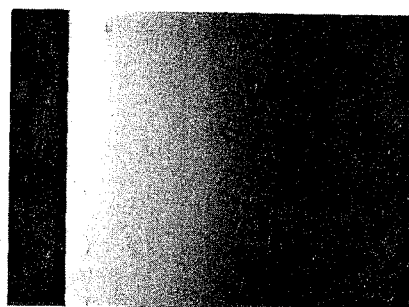
④ RAMP(H)
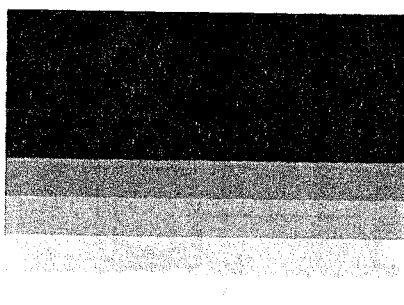
⑤ COLOR BAR(V)
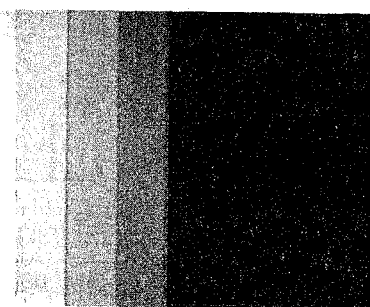
⑥ COLOR BAR(H)
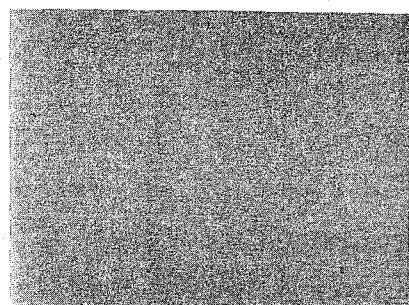
⑧ GRAY(C0h)
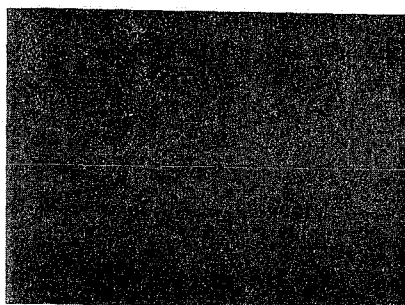
⑨ GRAY(80h)
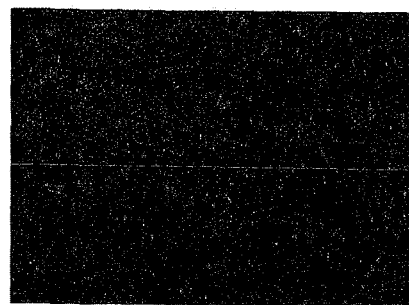
⑩ GRAY(40h)
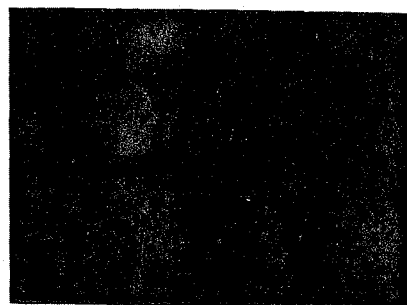
⑪ BLACK(00h)

⑫ HAED

⑬ STEP VA

3-2
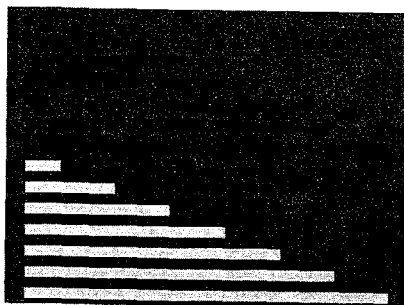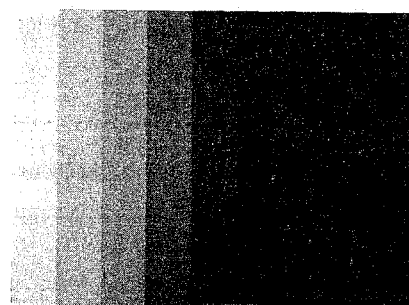
3-1. Density adjustment

Turn on the power while pressing three [←] , [→] and [↑] keys, Make sure that left picuture is appeared on the LCD.

```
┌─────────────────────┐
│ SYS JIGU MODE       │
│                     │
│ Select [up/down]    │
└─────────────────────┘
        │ Press the [ ↓ ] key.
        ▼
┌─────────────────────┐
│ Key Test            │
│                     │
└─────────────────────┘
        │ Press the [ ↓ ] key.
        ▼
┌─────────────────────┐
│ Print Led Test      │
│                     │
│ [←] on/OFF [→]      │
└─────────────────────┘
        │ Press the [ ↓ ] key.
        ▼
┌─────────────────────┐
│ Alarm Led Test      │
│                     │
│ [←] on/OFF [→]      │
└─────────────────────┘
        │ Press the [ ↓ ] key.
        ▼
┌─────────────────────┐
│ Buzzer Test         │
│                     │
│ [←] on/OFF [→]      │
└─────────────────────┘
        │ Press the [ ↓ ] key.
        ▼
┌─────────────────────┐
│ Lcd Test            │      2 seconds later  ┌──────────┐   OK   ┌───────────────────────────┐
│                     │──────────────────────▶│          │───────▶│ All dots on LCD are lighted.│
│ ALL Display         │                       └──────────┘        └───────────────────────────┘
└─────────────────────┘                                                   Press the [ ↓ ] key.

┌─────────────────────┐
│ Lcd Test            │      2 seconds later  ┌──────────┐   OK   ┌───────────────────────────┐
│                     │──────────────────────▶│          │───────▶│ All dots on LCD are put out.│
│ ALL Clear           │                       └──────────┘        └───────────────────────────┘
└─────────────────────┘                                                   Press the [ ↓ ] key.

                                                         NG   ┌───────────────────────────┐
                                                         NG   │ In case NG, check the     │
                                                              │ harness.                  │
                                                              │ Replace the LCD.          │
                                                              └───────────────────────────┘
```

to next page

UP-D5500 V1

Lcd Contlast

Dark [←] 18 [→] Light

Press the [↓] key.

Eeprom R/W Test

Eeprom R/W Test
Test OK

→ OK

Press the [↓] key.

Eeprom R/W Test
Test NG

NG → Check the harness.

FMY Loop Test

FMY Loop Test
Test OK

→ OK

Press the [↓] key.

FMY Loop Test
Test NG

NG → Check the harness.

IF Loop Test

IF Loop Test
Test OK

→ OK

Press the [↓] key.

IF Loop Test
Test NG

NG → Check the harness.

PRT Loop Test

Initializing

PRT Loop Test
Test OK

→ OK

Press the [↓] key.

PRT Loop Test
Test NG

NG → Check the harness.

to next page

```
         │
         ▼
┌─────────────────────┐
│ Sensor Test         │
│                     │
│                     │
└─────────────────────┘
         │  Press the │↓│ key.
         ▼
┌─────────────────────┐
│ 0123456789UVWXYZ    │
│                     │
│ No.          [MEN]  │
└─────────────────────┘
         │  Press the │↓│ key.
         ▼
┌─────────────────────┐
│ Step(v) │←│ xx │→│ ??? │
│                     │
│ No.          [PRN]  │
└─────────────────────┘
         │  Press the │↓│ key.
```

When the LCD indication is appeared as left, adjust the ??? numerical value to 156 by inserting(inserting: The thermal head is preheated.) or taking out the ribbon with printing paper inserted.(Ribbon is inserted: the numerical value →smaller, Ribbon is taken out: the numerical value →bigger)
Press the │PRINT│ key.
After thermal head replacement, readjust the ??? numerical value to 156 by inserting or taking out the ribbon with printing paper inserted.
Press the │PRINT│ key.
Adjust │←│ and │→│ keys so that the print before replacing the thermal head is the same density as the print after replacing the thermal head.

│←│ ···light
│→│ ···dark

```
         ▼
┌─────────────────────┐
│ Test End            │
│                     │
│ Test │←│ │→│ Exit   │
└─────────────────────┘
         │  Press the │→│ key.
         ▼
┌─────────────────────┐
│                     │
│                     │
│ Q1          Ready   │
└─────────────────────┘
```

The printer is operated as normal mode .
(The usual operation from IF command is possible.)

UP-D5500 V1

SECTION 4
MECHANICAL OPERATION

4-1. ENTERING THE MECHANICAL ADJUSTMENT MODE

Turn on the power switch $\boxed{①}$ while pressing $\boxed{←}$, $\boxed{→}$, and $\boxed{↓}$ keys.

* This adjustment mode is used for sensor level adjustment when the PRT-2, SE-44, SE-45, SE-46, SE-47, SE-48, SE-53, SE-54, SU-16, SU-17, and SU-18 boards and each component are replaced.

4-2. PROCEDURE AND METHOD

• Enter the mechanical adjustment mode, move the cursor to the item by pressing $\boxed{↑}$ and $\boxed{↓}$ keys, and press the $\boxed{EXEC}$ key.

```
MECHA CHECK
```

• The adjustment result appears liquid-crystal display when the adjustment item is completed.

OK   H'B0
NG   NG command + data (Refer to the command list.)

(Adjustment example)
Sensor check [EXEC]
OK   H'B0
NG   H'E8 + H'81(The tray and head thermistor are NG.)

(1) Mechanical check

• Checks the communication with the SY board.
  1) Pull out the load tray and ribbon cassette from the unit.
  2) Press the ⎡EXEC⎤ key for mechanical check.

• Adjustment result

Result	Contents of display
OK	H'B0
NG	No answer

Note : For NG, it is impossible to execute the communication with the SY board. Therefore, the subsequent adjustments cannot be performed.

(2) Sensor check

• Each sensor check
  • PP-JAM sensor (Paper jamming detection)
  • LOAD-TMG sensor (Load edge detection)
  • PP-TYPE sensor (OHP/plain paper detection)
  • RBN-CST sensor (Ribbon cassette detection)
  • EJCT-TMG sensor (Eject error detection)
  • TRAY sensor (Tray detection)
  • Head thermistor check
    1) Pull out the load tray and ribbon cassette from the unit.
    2) Press the ⎡EXEC⎤ key for sensor check.

• Adjustment result

Result	Contents of display
OK	H'B0
NG	H'E8+H'## (NG+data)

Note : In case of NG, refer to the corresponding list.

(3) Load motor

- Load motor driving and load FG sensor check
  - Load motor driving
  - LOAD-FG sensor (Load value detection)
    1) Pull out the load tray and ribbon cassette from the unit.
    2) Press the ⌊EXEC⌋ key for a load motor.

- Adjustment result

Result	Contents of display
OK	H'B0
NG	H'EA

(4) Mechanical sensor

- System motor driving, mechanical sensor, and barcode sensor check
  - System motor driving
  - BARCODE-FG sensor (System motor drive detection)
    1) Pull out the load tray and ribbon cassette from the unit.
    2) Press the ⌊EXEC⌋ key for a mechanical sensor.

- Adjustment result

Result	Contents of display
OK	H'B0
NG	H'EA

(5) Platen position

- Step motor driving and platen position sensor check
  - Step motor driving
  - PLT-POS sensor (Platen home detection)
    1) Pull out the load tray and ribbon cassette from the unit.
    2) Press the ⌊EXEC⌋ key for platen position.

- Adjustment result

Result	Contents of display
OK	H'B0
NG	H'EA

(6) Ribbon FG

- Ribbon motor driving and ribbon FG sensor check
  - RBN-MOTOR driving
  - RBN-FG sensor (Ribbon rotation detection)
    1) Pull the load tray and ribbon cassette from the unit.
    2) Press the ⌈EXEC⌋ key for ribbon FG.

- Adjustment result

Result	Contents of display
OK	H'B0
NG	H'EA

(7) Paper path check

- Load and eject path check by the automatic adjustment loading of ribbon code sensor and barcode sensor
  - RBN-CD sensor (Ribbon code detection)
  - Barcode sensor (Ribbon barcode)
  - Load and eject operation
    1) Put one sheet of OHP paper in the load tray, then set.
    2) Prepare a ribbon for plain paper.
    3) Locate the beginning of the cyan portion manually so that a ribbon code is not put in the sensor position.
    4) Set the ribbon cassette.
    5) Press the ⌈EXEC⌋ key for paper path check.
   6) Perform the load and eject operation.

- Adjustment result

Result	Contents of display
OK	H'B0
NG	H'E9＋H'## (NG＋data)

Note : In case of NG, refer to the corresponding list.

(8) Motor stop

- All the motors stop.

(9) Sensor adjustment data check

- Displays the adjustment values of a paper type sensor, ribbon code sensor, ribbon FG sensor, and barcode sensor. (Following data is indicated by pressing ⬅ and ➡ keys.)

- Result (H'F1 + data 4)
- H'F1+H'##(data 1)+H'##(data 2)+H'##(data 3)+H'##(data 4)

(Example)
H'F1+H'B3(data 1)+H'0A(data 2)+H'F2(data 3)+H'7E(data 4)
- Emission value of data 1 sensor   3.4 V=5×179/256
- Data 2 emission low level   0.2 V=5×10/256
- Data 3 emission high level   4.7 V=5×242/256
- Data 4 threshold   2.5 V=5×126/256

[Error data list]
- General display
  NG   H'B0
  Error   H'EA

- Sensor check
  Data of less than error command H'E8 + (Bit matching indication)

[7] TRAY	[6] LD_TMG	[5] EJ_TMG	[4] RBN_CST
[3]	[2] PP_TYPE	[1]	[0] HED_THRM

- Paper path check
  Data of less than error command H'E9 + (Bit matching indication)

[7] TRAY	[6]	[5]	[4]
[3]	[2] PP_TYPE	[1] RBN_CD	[0] BARCODE

- Others
  Data of less than error command H'E0 + (Bit matching indication)

[7] Motor/sensor error	[6] Paper jamming	[5] Ribbon error
[4] No ribbon	[3] No paper	[2] Ribbon end
[1] Remove paper	[0] Media mismatch	